DOCUMENT RESUME

ED 057 963 95 RC 005 853

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TITLE A Rural Internship Program Model.
INSTITUTION California State Dept. of Education, Sacramento.
SPONS AGENCY Office of Education (DHEW), Washington, D.C. Bureau of Educational Personnel Development.
PUB DATE 71
NOTE 85p.

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS Cooperative Planning; *Interagency Cooperation; *Internship Programs; Program Design; *Program Evaluation; Recruitment; *Rural Areas; Supervision; *Teacher Education; Teacher Interns

ABSTRACT

Seven rural California counties participated in a teacher preparation internship program funded by the Education Professions Development Act. The 101 elementary teacher intern candidates--having a wide range of academic backgrounds, personal interests, and talents--first took part in an 8-week summer preservice experience consisting of (1) orientation to elementary curriculum, diagnostic instruments, lesson planning, classroom routines, organization, and management; (2) half-day student-teaching activities with fully certified master teachers; and (3) orientation to and study of the sociology of the rural community, additional methodology, and the customary district orientation procedures for new teachers. The year of internship represented a melding of 5 interfacing elements: (1) classroom teaching; (2) problem-centered seminars; (3) assistance from supervisors; (4) professional coursework; and (5) a continuous program of self-evaluation and autonomous learning. A summer postservice period provided an opportunity for the intern to complete his teacher preparation on an individual basis, with some freedom to select fields of study or engage in other activities. The internship program emphasized the interrelatedness of the activities and responsibilities of the participating school districts, offices of county superintendents of schools, the State Department of Education, and the colleges and universities. The major portion of the text presents an evaluation of the recruitment and selection procedures and a description of the program model, its sequential and mutually cooperative implementation, and the degree to which program objectives were attained. (JH)

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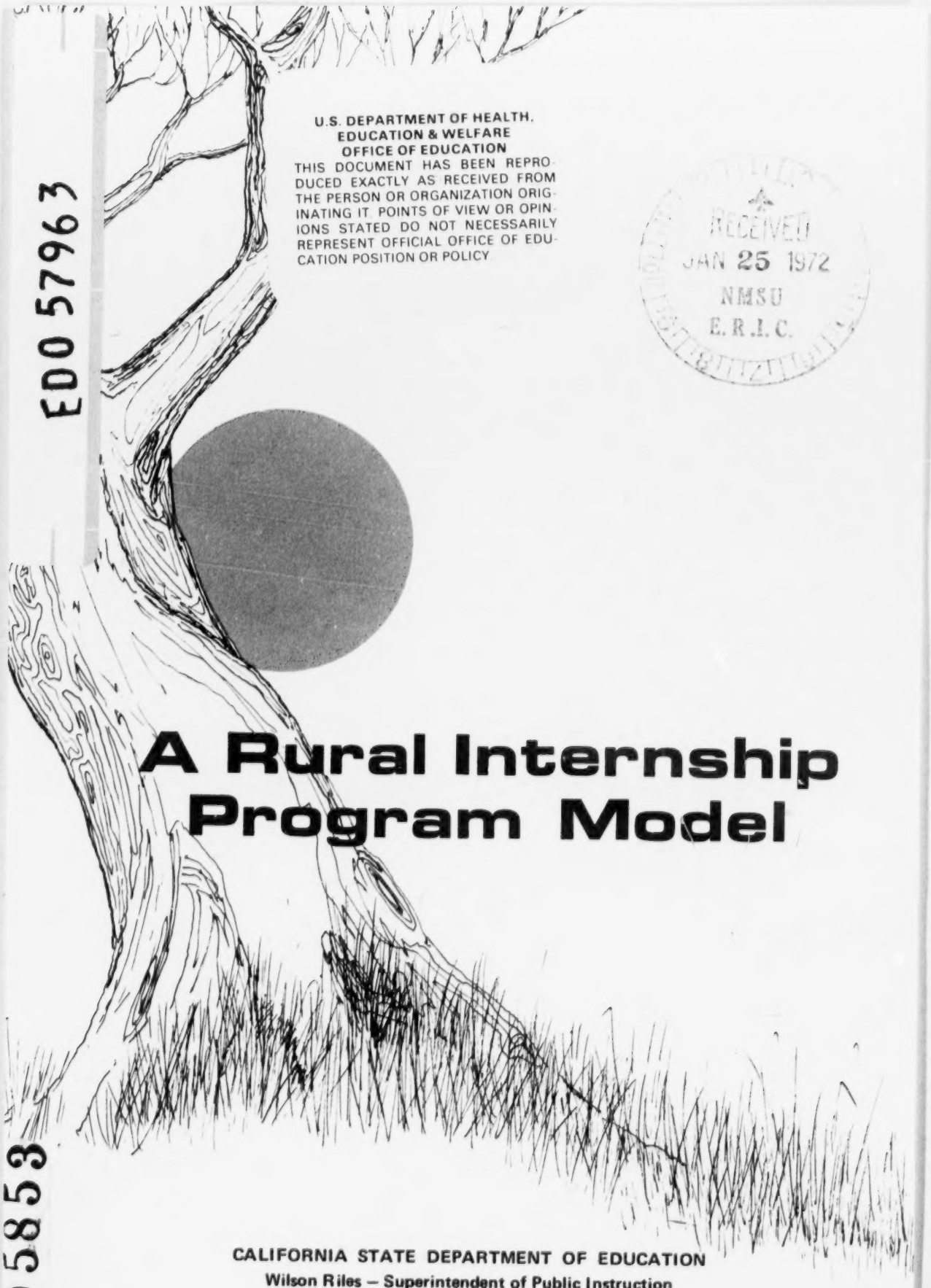

A Rural Internship Program Model

CALIFORNIA STATE DEPARTMENT OF EDUCATION
Wilson Riles – Superintendent of Public Instruction
Sacramento, 1971

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A Rural Internship Program Model

by

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Director, EPDA, Part B-2, Rural Internship Project

and

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This publication, which was funded under provisions of the Education Professions Development Act, was edited and prepared for photo-offset production by the Bureau of Publications, California State Department of Education, and was published by the Department, 721 Capitol Mall, Sacramento, CA 95814.

Printed by the Office of State Printing

1971

Foreword

Education is more than a process of preparing students to do particular jobs. It is more than a field of study for teachers. It is more than a method of imparting knowledge.

Education, to me, means preparing our children to become constructive citizens in an era of "future shock." It means teaching these individuals to learn to think and reason creatively and positively.

I know this type of teaching is going on in many of the schools of our state. I want to do whatever I can to "make it happen" in an even larger number of classrooms. I know if it is to happen, it will be the result of the concerted efforts of many people. But most of all, it will occur when interaction occurs again and again between teacher and child.

I understand that the teacher interns who took part in the project described in this publication achieved an unusually high level of interaction with the children they taught. The authors tell me the interns "were able to *listen* to their pupils and to stimulate pupil participation to a greater extent than is ordinarily found in elementary school classrooms." The interns, according to the authors, "learned to influence their pupils indirectly by accepting their feelings, praising them, accepting their ideas, and questioning them, instead of depending upon direct influence as exemplified by lecturing, giving directions, and criticizing."

I congratulate all who were involved in this project, which has produced for us a model for preparing teachers in the rural areas of California. I encourage others to examine the model and project findings to determine whether they can use the material for developing models for teachers in other areas of the state.

Wilson Riles

Superintendent of Public Instruction

Preface

A great many persons were instrumental in the success of the rural internship project described in this publication, a project designed and implemented by the former Bureau of Teacher Education and Certification under the leadership of Carl A. Larson, Bureau Chief. Special recognition must go first to the intern coordinators in the seven counties involved in the project. Their dedication and devotion was truly remarkable. Appreciation is also expressed to the participating principals and other administrators for their tremendous cooperation.

Two recognized authorities in their fields guided the scholarly advance of this study. Douglas L. Minnis, Head of Teacher Education at the University of California at Davis, was responsible for the development and professional growth of the personnel involved in the project. George Yonge, Associate Professor of Education at the University of California at Davis, directed and monitored the research design of the project. Witnout the experience and skill of these two men, the study would not have been feasible.

The contribution of the late Leonard Grindstaff is also appreciated. As president of the former California Association of County Superintendents of Schools, Dr. Grindstaff gave the interns an opportunity to publicize their program.

Last, and perhaps most important, are the interns whose extraordinary professional promise has made this study most rewarding. Here is their story.

ALWIN J. SCHMIDT
Deputy Director for Management

IV/V
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Participants in the Rural Internship Program, 1969-70[1]

FRESNO COUNTY

Ernest A. Poore, County Superintendent of Schools
Edward C. Deutschman, Assistant County Superintendent of Schools
Bonnie Lemons, County Intern Coordinator
Carl Stutzman, College Representative

Coalinga Joint Unified School District
Louis M. Cosans, Superintendent
Robert D. Vert, Principal, Nell Dawson Elementary School
Marian Apple, Intern

Firebaugh Joint Elementary School District
Morris W. Kyle, Superintendent
Morris W. Kyle, Principal, Riverview Elementary School
Jay Yake, Intern

Fresno Colony Elementary School District
Cecil E. Harris, Superintendent
Frank Netzer, Principal, Ivy Elementary School
Irma Mitchell, Intern

Kerman-Floyd Union Elementary School District
William Graham, Superintendent
William Graham, Principal, Kerman-Floyd Intermediate School
Anne Lyles, Intern

Kings Canyon Joint Unified School District
Silas Bartsch, Superintendent
Verne Bretz, Principal, Navelencia-Great Western Elementary School
Phillip Hixson, Intern

---

[1]The titles and locations given for persons listed here are those that were in effect when this report was prepared.

Marvin Rempel, Principal, Windsor-Washington Elementary School
Victor Davis, Intern

Madison Elementary School District
Albert J. Hooper, Superintendent
Kenneth L. Kline, Principal, Sunset Elementary School
Ken W. Say, Intern

Mendota Union Elementary School District
Ashton Boyer, Superintendent
Joyce Larey, Principal, Washington Elementary School
Kathlyn Deveau, Intern
Bessie Tillinghast, Intern
Antonia Van Wormer, Intern
Tommy Robison, Principal, McCabe Elementary School
George Ann Chatterley, Intern
Vincie Harmon, Intern

Raisin City Elementary School District
Raymond D. Harris, Superintendent
Raymond D. Harris, Principal, Raisin City Elementary School
Joseph Bratton, Intern
Jacqueline Davis, Intern
B. Wayne Taylor, Intern
Lupe Tijerina, Intern

Selma Unified School District
J. Frank Parks, Superintendent
Lowell Hiebert, Principal, Jackson Elementary School
Janice Cox, Intern
Milton Munro, Intern

KINGS COUNTY

Gerald L. Jacobus, County Superintendent of Schools
Robert Bair, Assistant County Superintendent of Schools
Jane Lawlor, County Intern Coordinator
Carl Stutzman, College Representative

Armona Union Elementary School District
H. Denham, Superintendent
H. Denham, Principal, Armona Elementary School
Diane Annand, Intern

Central Union Elementary School District
James Focht, Superintendent
Deane Villa, Principal, Stratford Elementary School
Linda Estile, Intern
Marcia Newton, Intern

Hanford Elementary School District
Francis Martin, Superintendent
Elmer Gould, Principal, Lee Richmond Elementary School
Karlin Giraudi, Intern
Martha Skidmore, Intern

Island Union Elementary School District
Marion E. Wilson, Superintendent
Marion E. Wilson, Principal, Island Elementary School
Ralph Svilarich, Intern

Kit Carson Union Elementary School District
Vance K. Gray, Superintendent
Vance K. Gray, Principal, Kit Carson Elementary School
Darleen H. Johnson, Intern

Lakeside Union Elementary School District
William R. Buckley, Superintendent
William R. Buckley, Principal, Lakeside Elementary School
Ronald Cheyney, Intern
Mabel McGahan, Principal, Gardenside Elementary School
Ellen Frasieur, Intern

Lemoore Union Elementary School District
Eugene Billingsley, Superintendent
Ronald Allvin, Principal, Washington Elementary School
Kenneth Fritz, Intern
A. James Golden, Intern
Ronald Allvin, Principal, Lincoln Elementary School
Jean Haddock, Intern
Everett L. Putman, Principal, P.W. Engvall Elementary School
Michael Walton, Intern

Reef-Sunset Union Elementary School District
Vern Dudgeon, Superintendent
Paul Remland, Principal, Kettleman City Elementary School
Adam Roybal, Intern
Arthur Villi, Intern

RIVERSIDE COUNTY

Leonard L. Grindstaff, County Superintendent of Schools
Barbara Provost, Director of Instruction
Dorothy Soeberg, County Intern Coordinator
Irving Balow, University Representative

Banning Unified School District
Owen W. Corbin, Superintendent

James Beal, Principal, Hemmerling Elementary School
Karolee S. Louzis, Intern
John J. Dew, Principal, Central Elementary School
Laura Spencer, Intern

Beaumont Unified School District
Fred Furnivall, Superintendent
James T. Weber, Principal, Palm Elementary School
Jean Barney, Intern
Linda Gable, Intern
Anna M. Hause, Principal, Sixth Street Elementary School
Tom Dorrough, Intern
John Klure, Intern

Elsinore Union Elementary School District
John A. Miller, Superintendent
Joseph Zylla, Principal, Machado Elementary School
Louise Fairbairn, Intern
W. Keith McCarthy, Intern

Menifee Union Elementary School District
Harm Duitscher, Superintendent
Harm Duitscher, Principal, Menifee Elementary School
Laraine Shepard, Intern

Nuview Union Elementary School District
David J. Wiebe, Superintendent
David J. Wiebe, Principal, Nuview Elementary School
Cathleen Jones, Intern
Donna Raith, Intern

Perris Elementary School District
William C. Bonngard, Jr., Superintendent
Nida Thompson, Principal, Perris Elementary School
Cynthia Anderson, Intern
Stella Jaidar, Intern
Victor Giardinelli, Principal, Good Hope Elementary School
Duncan Burbridge, Intern
Helen Hindman, Intern

San Jacinto Unified School District
Dale R. Coogan, Superintendent
John G. Condos, Principal, Edward Hyatt Elementary School
Linda Williamson, Intern

Val Verde Elementary School District
Edward Simpson, Superintendent

Nell S. Greene, Principal, Val Verde Elementary School
Bernard Berg, Intern
Brenda Mayo, Intern

SAN BERNARDINO COUNTY

Roy C. Hill, County Superintendent of Schools
H. Hartley Hillsen, Assistant County Superintendent of Schools
Martha White, County Intern Coordinator
Clara McKinney, District Resource Consultant
Florence Mote, College Representative

Barstow Unified School District
Lewis Allbee, Superintendent

Henry Abbe, Principal, Yermo Elementary School
Camille McNall, Intern

Dudley Arnold, Principal, Daggett Elementary School
Doris Reitz, Intern

Phillip Chavez, Principal, Waterman Elementary School
Elizabeth Harris, Intern

Velma Daniel, Principal, Thomson Elementary School
Harold Edwards, Intern
Dianne Franco, Intern

Louis Fischer, Principal, Clara B. McKinney Elementary School
Roger Mercier, Intern

Hyman Gold, Principal, Henderson Elementary School
Doris Manis, Intern
Guillermo Palacios, Intern

Charles Johns, Principal, Hinkley Elementary School
Leora Sterne, Intern

Frederick Luehe, Principal, Montara Elementary School
Karen Christensen, Intern

T.J. Owens, Principal, Barstow Intermediate School
Faith Dougherty, Intern
Judith James, Intern

Robert Stafford, Principal, Cameron Elementary School
Verdun LaChance, Intern
Frederick Wolf, Intern

Roland White, Principal, Skyline North Elementary School
Jerry Mazzola, Intern

SHASTA COUNTY

Ray Darby, County Superintendent of Schools
Oliver Neely, Director, Curriculum Services

Kenneth Phillippi, County Intern Coordinator
Cliff Robinson, College Representative

Grant Elementary School District
Alfred Cockrell, Principal, Grant Elementary School
Larry Solberg, Intern

Igo, Ono, Platina Union Elementary School District
Donald Bagley, Superintendent
Donald Bagley, Principal, Igo-Ono Elementary School
James Geil, Intern

Shasta Union High School District
Richard Haake, Superintendent
Charles Denny, Principal, Enterprise High School
Diane Sowder, Intern

SISKIYOU COUNTY

Paul Fisher, County Superintendent of Schools
Clark O'Dell, Associate Superintendent of Schools
Elsie DeAvilla, County Intern Coordinator
Cliff Robinson, College Representative

Bogus Elementary School District
Daniel Laney, Principal, Bogus Elementary School
Daniel Laney, Intern

Etna Union Elementary School District
Frederick Bennett, Superintendent
Frederick Bennett, Principal, Etna Elementary School
Harrie L. Whipple, Intern

Fort Jones Union Elementary School District
Roy Crocker, Principal, Fort Jones Elementary School
Vincent Tallerico, Intern

Grenada Elementary School District
Richard C. Dedrick, Principal, Grenada Elementary School
Sheba Solomon, Intern

Happy Camp Union Elementary School District
James C. Patton, Superintendent
James C. Patton, Principal, Happy Camp Elementary School
James Anderson, Intern

MacDoel Elementary School District
Jerry Ross, Principal, MacDoel Elementary School
Gary L. Lee, Intern

Weed Union Elementary School District
Leno Lenzi, Superintendent
Leno Lenzi, Principal, Weed Elementary School
Jean Carter, Intern
Patricia Holliday, Intern

Yreka Union Elementary School District
Robert B. Reynolds, Superintendent
Robert B. Reynolds, Principal, Jackson Street Elementary School
Leon Handley, Intern
Robert Singleton, Intern

TUOLUMNE COUNTY

Arthur McGrath, County Superintendent of Schools
Orville Millhollin, Assistant County Superintendent of Schools
Martin G. Petersen, County Intern Coordinator
Douglas Minnis, University Representative

Big Oak Flat, Groveland Union Elementary School District
William A. Gustafson, Superintendent
William A. Gustafson, Principal, Tenaya Elementary School
Sally Lanning, Intern
Leo Zuber, Intern

Curtis Creek Elementary School District
Euell Davenport, Superintendent
Euell Davenport, Principal, Curtis Creek Elementary School
David Mortensen, Intern

Jamestown Elementary School District
Larry Georgianna, Superintendent
Larry Georgianna, Principal, Jamestown Elementary School
Leonard Bennett, Intern
Linda Coombes, Intern

Soulsbyville Elementary School District
Glenn A. Palmer, Superintendent
Glenn A. Palmer, Principal, Soulsbyville Elementary School
Donna Peterson, Intern
Leo Sandoval, County Supervisor

Summerville Elementary School District
George T. Slaght, Superintendent
George T. Slaght, Principal, Summerville Elementary School
William Carey, Intern
Paul F. Gordon, Intern
Cindy H. Holm, Intern
Leo Sandoval, County Supervisor

Twain Harte-Long Barn Union Elementary School District
Warren McDonald, Superintendent
Warren McDonald, Principal, Twain Harte Elementary School
Karen D'Attilo, Intern
Warren Schmid, Intern
Anna S. Seidell, Intern

chapter I

GENESIS OF THE PROGRAM

In the spring of 1969, several factors combined to show the need for increasing the number of capable teachers in the rural areas of California and the consequent necessity to create a teacher education model for the preparation of teachers in such areas.

Some important research data had emphasized this need for teachers in rural areas. For example, one report presented an accounting of the percent of California teachers who hold provisional-type credentials.[1] This report clearly showed that districts in the rural areas of the state employ the greatest number of teachers serving on provisional or nonregular California credentials. Another report showed the geographic distribution of teaching talent in California. This report indicated that rural areas compare unfavorably with the rest of the state with respect to (1) retention of teachers; (2) percent of fully credentialed teachers; (3) years of experience of teachers; (4) number of teachers with advanced degrees; and (5) number of teachers whose majors are appropriate for the subjects they teach.[2]

Federal funds became available through the Education Professions Development Act (EPDA) of 1967, Part B, Subpart 2. In California, some of these funds were specifically earmarked for the preparation of teachers in rural areas of the state by Assembly Bill 920, Statutes of 1968, Chapter 1414 (Education Code sections 6475-6476.2). The Bureau of Teacher Education and Certification in the California State Department of Education, long interested in assuming a more effective role in pioneering programs for teacher education in California, had fortunately been provided the necessary manpower to accept the challenge of preparing teachers in rural areas.

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[1] *California's Need for Teachers, 1965-1975.* Prepared by Blair E. Hurd. Sacramento: California State Department of Education, 1965, pp. 4-5.

[2] "Geographic Distribution of Teaching Talent in California" (Appendix F), in *Citizens for the 21st Century.* A report from the State Committee on Public Education to the California State Board of Education. Sacramento: California State Department of Education, 1969, pp. 203-222.

The staff of the Bureau of Teacher Education and Certification had long believed that individual differences in teacher candidates are often ignored in teacher preparation programs, and the bureau believed that the development of a viable alternative to the conventional program was therefore highly desirable. An important requirement set forth by the bureau was that any teacher preparation model developed with the help of bureau staff members must emphasize accountability. Another stipulation was that it include well-stated objectives expressed in terms of teacher performance so that an accurate evaluation of the model's effectiveness could be made.

The actual plan was developed and was approved for funding in the amount of $199,000 by the State Board of Education.[3] The plan called for the preparation of approximately 100 teachers in an intern-type program. The period of preparation was to cover eight weeks in the summer before the first actual teaching day and then extend throughout the school year. The interns were to be given as much close supervision and individual help as possible. Such a plan fitted quite naturally into the procedures outlined in the Teacher Education Internship Act of 1967 (Education Code sections 13222-13242), a California law encouraging internships for the preparation of teachers through joint cooperative planning among school districts, offices of county superintendents of schools, and institutions of higher education.

The Bureau of Teacher Education and Certification also recognized the need to develop a program model in teacher intern preparation that would meet the challenge of cost effectiveness. All too often, research of this nature has produced a plan for the effective preparation of teachers, but at a per-unit (teacher) cost that is far too high for replication. The bureau's plan called for a number (N) of 100 teachers at a figure slightly under $200,000. This averages a little less than $2,000 per teacher, which is a reasonable per-unit cost considering that federal rules require that $600 be paid as a stipend to the intern during his first summer training period. The $2,000 figure is also well under "rule-of-thumb" expenditures established for EPDA funds and includes certain initial costs that would not be required once the model had been established and teacher preparation coordinators had been trained.

The funds were secured, and seven rural counties in California were invited to participate in the teacher preparation program. These

[3]Guidelines for the development and funding of the plan were supplied by the *California State Plan* (for attracting and qualifying teachers to meet critical teacher shortages, pursuant to the provisions of Part B, Subpart 2, of the Education Professions Development Act), prepared by the Bureau of Professional Development, Division of Compensatory Education, California State Department of Education, November, 1968.

were Fresno, Kings, Riverside, San Bernardino, Shasta, Siskiyou, and Tuolumne counties. The locations of these counties are shown on the map, Figure 1.

The following chapters present a thorough evaluation of the recruitment and selection procedures for the program and a description of the program model, its sequential and mutually cooperative implementation, and the degree to which the original objectives of the program were attained.

Fig. 1. California Counties That Participated in the Rural Internship Program, 1969-70

chapter II

RECRUITMENT AND SELECTION OF INTERNS

Approval of the EPDA, B-2, rural internship program was given in May, 1969. By mid-June, 101 elementary teacher intern candidates had been selected from among more than 200 applicants. The participating counties were represented as follows:

County	*Number of interns*
Fresno	19
Kings	18
Riverside	18
San Bernardino	17
Shasta	5
Siskiyou	11
Tuolumne	13

All of these counties contain remote areas for which it has always been difficult to obtain an adequate supply of highly qualified teachers. These areas are far from college and university campuses, distant from the centers of curriculum change, and out of the mainstream of innovation and change in teacher education. Such areas offer to the beginning teacher an opportunity to deal with most of the major problems facing education today: experiential deprivation, cultural and social isolation, poverty, and illiteracy of students; instability of the migrant population; ethnic minorities; the non-English-speaking student; and the disadvantaged student. It would appear from interviews with the candidates for the internship program that the problems acted as an inducement rather than as a deterrent to participation in the program. A number of candidates indicated they had been attracted to the rural internship program precisely because of the existence of these problems, a fact that is not surprising in view of the social awareness of recent college graduates.

Many and varied were the reasons given by the interns for actually seeking to enter the program. Of the 74 interns who responded to an

open-ended question about what had motivated them, nearly two-thirds (62 percent) said that they felt the program offered a chance to earn while learning to become a teacher. This appealed to them because they could not afford a fifth year in college, often because they were supporting families. The next most common response, given by 18 percent of the interns, was that they believed the program would provide either (1) a more effective way to become a teacher; (2) more direct involvement with students; or (3) a type of experience-based training in which theory would be integrated with practice. Many perceived the program as both relevant and practical.

Another common response, given by 15 percent of the interns, was that they had no interest in going back to college for another year; they were tired of school. Many of the remaining 5 percent of the candidates were attracted to the program because they wanted quicker preparation and an earlier beginning in their chosen profession than is offered by traditional programs. They were ready to start teaching.[1]

Not all applicants who wished to be considered, however, could meet the criteria laid down by federal guidelines. According to the Teacher Internship Act of 1967, only persons who are "otherwise engaged" are eligible to participate in the training program. This includes the following:

1. Unemployed persons
2. Persons employed in activities other than teaching
3. Persons who have not been employed as teachers or teacher aides for at least one school year immediately preceding the beginning of the training program
4. Persons who are employed by education agencies but who are not involved in the education process; e.g. custodians, cafeteria workers, bus drivers, and the like
5. College seniors or graduate students, other than those who have majored in education and have prepared themselves to be teachers
6. Substitute teachers who have been employed as teachers during 15 percent or less of the school year immediately preceding the beginning of the training program[2]

With a mode of twenty-two years (27 individuals), the 101 interns ranged in age from twenty-one years (nine individuals) to fifty-nine

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[1]See Appendix D for all questionnaires and survey instruments used.

[2]*Instructions to EPDA, Part B-2, Applicant Agencies.* Prepared by the Bureau of Personnel Development, Office of Education, U.S. Department of Health, Education, and Welfare, February 28, 1969.

years (one individual). Thirty of the 59 women were married, and 32 of the 42 men were married.

Bachelor of Arts degrees were held by 81 of the interns, while 17 of them had Bachelor of Science degrees. One had a Bachelor of Music Education; another, a Bachelor of Music; one, a Bachelor of Arts in Education; and one, a Bachelor of Divinity in addition to a B.A. Graduation dates ranged from 1943 to 1969, with 80 percent of the interns having graduated from college between 1967 and 1969.

Most of the interns came from California colleges and universities, although 17 interns had graduated from out-of-state institutions. Tables 1 and 2 list the colleges and universities from which the interns graduated.

The major field of the interns varied greatly and represented 37 different areas of study.[3] Detailed information on interns' major fields is presented in Table 3.

Although California law does not require teachers to have completed a minor, two-thirds of the interns had done so in fields that were nearly as numerous and varied as their majors. Information on the minor fields of the interns is provided in Table 4.

Almost as varied as their fields of study were the kinds of prior work experience cited by the interns. Table 5 lists jobs held by interns that involved experience with children, and Table 6 lists other kinds of work experience mentioned by interns. Numbers refer to the frequency of mention, since many interns listed three or more kinds of prior experience; some listed as many as nine different kinds.

The extraordinary versatility of the intern candidates is further indicated by the kinds of interests and talents they claimed to have and which they felt would enrich their teaching. Table 7 shows the frequency with which each interest or talent was mentioned, with most interns listing many items.

Probably the most revealing information of all as to the quality of the participants in the EPDA, B-2, rural internship program is shown by the honors they received and the elective offices they held in high school, in college, or in the community. Table 8 lists these honors and distinctions. It should be noted here, as in regard to some of the other tables, that many interns listed more than one item.

In summary, a review of the personal attributes and data assembled on these intern teachers indicates that they were a highly diverse group representing a great variety of colleges and universities

(Text continues on page 15.)

[3]California law permits the candidate who has a major that is legally nonacceptable (such as secretarial administration) to enter a district-initiated intern program with the understanding that he must complete an acceptable major or minors before being granted the Standard Elementary Teaching Credential.

Table 1
California Colleges and Universities from Which Interns Graduated

College or university	Number of interns
Fresno State College	21
University of California, Riverside	7
California State College, Fullerton	5
University of California, Davis	4
Azusa Pacific College	3
California Polytechnic College, Pomona	3
California Polytechnic College, San Luis Obispo	3
Chico State College	3
Loma Linda University	3
San Jose State College	3
University of California, Berkeley	3
University of California, Los Angeles	3
University of California, Santa Barbara	3
California State College, San Bernardino	2
Raymond College	2
San Diego State College	2
University of the Pacific	2
University of Redlands	2
California Baptist College	1
California State College, Long Beach	1
Humboldt State College	1
Lone Mountain College	1
San Francisco State College	1
San Luis Rey College	1
University of San Francisco	1
University of Southern California	1
Westmont College	1
Whittier College	1

Table 2

Out-of-State Colleges and Universities from Which Interns Graduated

College or university	Number of interns
Southern Oregon State College	2
Alcorn College, Alabama	1
Brigham Young University, Utah	1
Central Washington State College	1
Dakota Wesleyan, South Dakota	1
Eastern Washington State College	1
Indiana Central College	1
Linfield College, Oregon	1
Mars Hill College, North Carolina	1
Mary Baldwin College, Virginia	1
Memphis State University, Tennessee	1
Texas University of Arts & Industry	1
Thiel College, Pennsylvania	1
University of Wisconsin	1
Washington State University	1
Wheaton College, Illinois	1

Table 3
Interns' Major Fields

Major	Number of interns
Social science	15
History	9
English	8
Psychology	8
Music	7
Spanish	7
Art	6
Boys' physical education	3
Business administration	3
Girls' physical education	3
Home economics	3
Religion	3
Sociology	3
Biology	2
Geography	2
Political science	2
Antropology	1
Business	1
Commerce	1
Decorative art	1
Drama	1
French	1
Geology	1
German	1
History and government	1
International relations	1
Journalism	1
Linguistics	1
Literature	1
Marketing	1
Mathematics	1
Music education	1
Philosophy	1
Recreation	1
Secretarial administration	1
Speech and drama	1

Table 4
Interns' Minor Fields

Minor	Number of interns
History	6
Economics	4
English	4
French	4
Philosophy	4
Political science	4
Biology	3
Social science	3
Sociology	3
Spanish	3
Boys' physical education	2
Geography	2
Humanities	2
Music	2
Religion	2
Anthropology	1
Art	1
Botany	1
Business	1
Chemistry	1
Clothing	1
Education	1
Experimental psychology	1
German	1
Journalism	1
Liberal arts	1
Library science	1
Mathematics	1
Oriental language	1
Physical science	1
Psychology	1
Vocal music	1

Table 5

Interns' Prior Work Experience Involving Contact with Children

Experience	Frequency of mention by interns
Teacher, Sunday school or Bible school	45
Youth group leader	25
Camp counselor	23
Instructor, sports	17
Instructor, arts	12
Tutor	11
Preschool teacher aide	10
Substitute teacher	9
Elementary school teacher aide	8
Babysitter	7
Minister, teacher in religious education programs	6
Recreation director	6
Private school staff member	4
Laboratory school aide	3
Participant in community activities	3
Library aide	2
Worker at migrant summer camp	2
Newspaper distributor or deliverer	1
Room mother	1
Worker in job corps	1
No experience of this type	16

Table 6
Areas of Interns' Prior Work Experience Not Involving Contact with Children

Experience	Frequency of mention by interns
Office work	52
Retail sales	34
Restaurant or hotel work	23
Cleaning, gardening, and the like	21
Agriculture	15
Medical services	15
Odd jobs	15
Heavy construction	11
Library services, college reader	11
Transportation	11
Instructing in arts or sports	9
Technological services	8
Military	7
Factory work	6
Human welfare	6
Newspaper or radio	6
Performing arts	6
Civic or college, manager level	4
Insurance	4
Civic services (Police or fire department)	3
Building trades	2
Research	2
Surveying	2
Credit supervisor	1
National sales - yellow pages	1
Peace corps	1
No experience of this type	6

Table 7
Interns' Interests and Areas of Talent

Interest or area of talent	Frequency of mention by interns
Piano	32
Games, outdoor sports	25
Art, painting	24
Guitar, other instruments	23
Singing, solo or choir	20
Crafts (leather, jewelry, wood, and the like)	13
Sewing, weaving	10
Ceramics	9
Folk, square dancing	9
Creative, modern dancing	8
Storytelling, children's literature, dramatics	8
Nature study, camping	7
Foreign languages, bilingualism	6
Politics, religion, other cultures	6
Creative writing, newspaper work	5
Geology, archeology, space science	4
Reading	4
Flying (pilot's license)	3
Gardening, farming	3
Photography, amateur radio work	3
Auto mechanics	2
Cooking	2
Typing, shorthand	1
No interests or talents specified	10

Table 8

Honors Received and Elective Offices Held by Interns

Honor received or office held	Frequency of mention by interns
Officer of college clubs, sorority, fraternity, commission, student body, and the like	48
Officer of high school clubs, class, student body, and the like	46
Valedictorian, high school; other honors for high grades; scholarships	43
Valedictorian, college; dean's list; other honors for high grades	23
Sports awards, high school, college, community, and international: major and minor sports, drill team, swimming, cheer leading, participation in rodeos, and the like	20
Officer of or awards from state and national honor societies, or the like	17
Officer of church and community youth groups, Hi-Y, Youth for Christ, 4-H, and the like	21
Leadership in high school and college musical groups: majorette, director, member of operetta cast; music awards; and the like.	13
Officer, church and community adult groups, boards of directors; 4-H leader; and the like	9
CSF life member	8
Winner of high school and college contests, member of debating team, participant in speech festival, and the like	5
Editor of high school newspaper, magazine, yearbook	6
Leader in high school and college dramatics	3
Exchange student to foreign country	1
Listed in *Who's Who in American Colleges and Universities*	1
National merit award nominee	1
No honors received or elective offices held	11

in California and across the nation. The range of their majors and minors testifies to the breadth of their academic background, while their numerous personal interests and talents attest to a wide variety of skills and hobbies. Moreover, this was a young group (83 percent were under thirty years of age; 62 percent were twenty-five years old or younger). These young people had worked hard at many jobs and had had considerable experience with children. The honors they had received are impressive. These extraordinary teacher interns needed to be gainfully employed, were highly motivated to teach in rural areas, and were eager and ready to begin. The program they undertook, which will be described in the chapters to follow, is illustrated by the model shown in Figure 2.

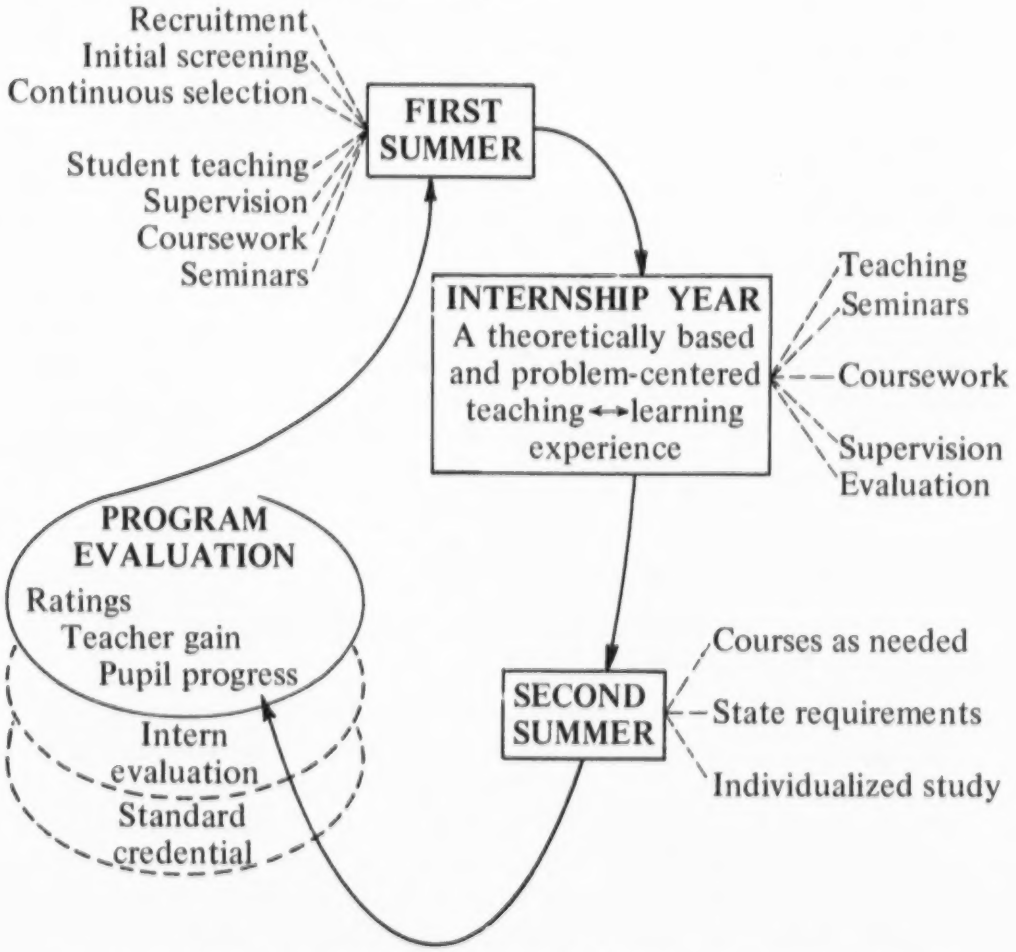

Fig. 2. A Rural Internship Program Model: Diagram of a Mutual Effort for the Preparation of Teachers for Rural Areas by Certain California School Districts, Offices of County Superintendents of Schools, Colleges, Universities, and the State Department of Education

chapter III

SEQUENTIAL IMPLEMENTATION OF THE PROGRAM MODEL

A "program model has as its purpose the organizing of parts, functions, and processes into a meaningful format for analysis and understanding."[1] Therefore, a model should help to clarify for the reader the relationship among the various components.

In the case of the rural internship model (Figure 2, page 15), an examination should be made both in terms of (1) the time sequence of events by which the program was implemented during its first year; and (2) the interfacing of effort and responsibility on the part of all the participating agencies.

In this chapter the program model will be discussed in terms of the time sequence of its major components: (1) the summer preservice period; (2) the internship year; and (3) the summer postservice period. Each component will be described according to its design and with reference to the appraisal and assessment made by the participants in the first internship program.

The Summer Preservice Period

The summer preservice experience, eight weeks in length, is composed of the following elements:

1. One week of orientation and introduction to elementary curriculum, use of diagnostic instruments, lesson planning, classroom routines, organization, and management.
2. Four to five weeks of half-day student teaching activities in an exemplary elementary school situation with capable, willing, fully certificated master teachers. Each intern is placed at the grade level he has requested. Supervision, assistance, and counseling are the responsibility of the intern coordinator, with professional help from the building principal, the liaison

[1]Walt LeBaron, *Systems Analysis and Learning Systems in the Development of Elementary Teacher Education Models.* Falls Church, Va.: U.S. Department of Health, Education, and Welfare, Office of Education, Bureau of Research, 1969, p. 5.

professor appointed by the cooperating college or university, and the state director of the project.

The other half day is spent in lesson planning and preparation, problem-centered seminars, planning sessions with the master teachers, and college-level coursework related to the needs of the interns. Methods of teaching reading, including phonics, are presented early in the program. The emphasis in both the teaching and the coursework is upon individualization and diagnostic and prescriptive teaching.

3. Two or three weeks of additional preparatory experience involving orientation to and study of the sociology of the rural community, additional high priority methodology, and the customary district orientation procedures for new teachers.

This intensive eight-week summer period, during which the interns receive $75 per week, is visualized not only as a critical element of the preparation but also as part of the continuous screening and selection process. It is admittedly a rigorous selection process. Not only must the intern candidates demonstrate enough resilience, readiness, and competence to show clearly that they will be able to succeed when they begin teaching in September, but they also have to survive physically and emotionally. Their difficulties include finding a place to live and the strain of moving. And they must do all this with an income of only $75 per week until they receive their first paycheck on October 1.

The time line presented in Figure 3 shows the sequence of events during the summer training period.

	First week	Second through fifth or sixth week	Seventh and eight weeks
Morning	Orientation Elementary curriculum	Student teaching	Coursework in methodology
Afternoon	Diagnostic lesson planning Classroom routines Management	Problem-centered seminars Planning sessions One college course	Sociology of rural community District orientation

Fig. 3. Time Line for the Summer Experience

In general, responses to questionnaires indicated that about two-thirds of the interns, looking back at their summer preservice preparation after a year of teaching, felt that it was a good, helpful,

or effective experience. Other responses varied greatly. They ranged from assessments of the program as "minimal" and "unrealistic" to the feeling that it was "long and tiring." Some interns felt that "the outcome was disproportionate to the input."

Those summer methods courses that were organized in response to the needs of the interns were enthusiastically received, while reactions were understandably negative to other courses. Interns preferred actual classroom experience in student teaching to watching a demonstration teacher, no matter how expert. They seemed to agree that although the demonstration teaching was "excellent," it was not "relevant" for them. Problem-centered seminars were well received and were described by the interns as "helpful," "enjoyable," "practical," or "beneficial." All comments were carefully reviewed, and they were used in the development of improved plans for preservice training for the second group of interns.

The Internship Year

The year of internship represents a melding of five interfacing elements: (1) classroom teaching at an appropriate level; (2) problem-centered seminars; (3) assistance from supervisors; (4) professional coursework; and (5) a continuous program of self-evaluation and autonomous learning on the part of the interns.

Classroom Teaching at an Appropriate Level

Not only is it desirable for the intern to teach at a grade level for which he has expressed a preference, but it is also vital that the intern clearly demonstrate during the summer program that he will be successful at that level. When an intern has satisfactorily completed his preservice training, the school district should not make last-minute changes of assignment to a level for which the intern will be relatively unprepared. The summer preparation program is designed to be as situation-specific as possible. The case of the one misassigned intern who was released from the program after the first semester illustrates the great importance of appropriate placement to successful achievement in the internship year.

Assignments of the interns ranged from kindergarten to the eighth grade, from self-contained classrooms to departmentalized classes, from one-room schools to schools serving kindergarten through grade eight in rural unified districts. One intern was placed in a one-room school, and one was assigned to a two-teacher school. Over three-fourths of the interns were placed in larger schools in self-contained classrooms ranging from the second through the eighth grades, with most of them teaching in grades three through six. The remaining one-fourth of the interns were distributed among kinder-

garten, prefirst grade, first grade, and ungraded primary classes. Two interns were placed in small ungraded classes for educationally handicapped, hyperkinetic children. One intern had a first grade class that was composed almost entirely of repeaters. In retrospect, it seems clear that an intern is much more likely to be successful when he is placed with children who are within the normal range of achievement and behavior. Interns are equipped neither by experience nor by training to handle problems already diagnosed as challenging to experienced teachers.

Most of the interns felt that their assignments were good. An analysis of their unstructured comments indicates that slightly more than two-thirds were most enthusiastic about their placements. Another fifth thought their placements had been "fair," "about right," or "okay." The remaining few either said that their placements were bad for them or made no comment.

Principals, by and large, tended to agree with the interns' assessments of their placements. Two-thirds of the principals believed the teaching assignments had been either appropriate or extremely appropriate. About one-fourth classified the assignments in the middle range, while ratings of principals of ten interns indicated they thought that the placements had been inappropriate. Only one assignment was bad enough to be rated "extremely inappropriate" by a principal.

What about the school as a learning environment for the intern? This question has two dimensions: (1) professionalism and moral support; and (2) physical facilities and instructional materials. Interns were asked to describe their feelings about both these aspects of their schools.

In terms of professional commitment to the education of the beginner, the schools where the interns were placed varied tremendously. Half of the interns characterized their schools as excellent learning environments for them. There were many enthusiastic comments like "perfect," "fantastic," and "couldn't be better." Nearly one-third or more felt their schools had been "adequate" or "satisfactory." The remaining one-sixth, however, described their schools as poor or bad in terms of the effect on them professionally. It is clear, moreover, that some interns felt unwanted and ignored by the school personnel where they had been hired. Such comments as "rough" and "greatly disappointed" are representative here.

An appraisal of how the interns viewed their acceptance as teachers by the school and community provides some additional information of significance to this study. Nearly two-thirds of the interns stated that they believed they had been well accepted by the parents and the community. Comments like "They are proud of

me," "They are happy with what I have done," and "If you care, so do they" are illustrative. With the exception of three interns who candidly said they did not feel accepted as teachers in the community, all the rest stated they appeared to be accepted about as well as any other teacher.

Principals were also asked to provide information from their point of view on how the interns were accepted. They responded in terms of acceptance by the pupils, the parents, and the faculty. In general, the findings corroborate the impressions of the interns themselves. Slightly more than 82 percent of the principals believed that the interns had been well accepted by their pupils; 83 percent indicated that the interns had been well accepted by the parents; and nearly 86 percent said that the interns had been well accepted by the other faculty members in the school. Furthermore, 76 percent of the principals believed that the interns had had a positive impact and had exerted a professionally beneficial effect on the total life of their schools during the year.

The poverty of the rural school districts is reflected in the interns' assessments of the physical facilities and the materials of instruction that were available to them. Although 30 percent characterized their physical facilities and materials as excellent, fully half of the interns felt their physical support was only average, while the remaining 20 percent described the facilities and materials as extremely poor.

Even though the facilities were distinctly limited, the principals believed that the interns utilized to excellent advantage whatever they did have available. An overwhelming 90 percent of the principals responded "somewhat capably" or "extremely capably" to the question, "How has the intern utilized the special services, supplementary materials, and extra help which are available in the school?"

Problem-centered Seminars

Coordinators in the counties involved in the program organized regular seminar meetings for their interns during the internship year. Except for a general directive as to problem-centeredness, each coordinator was free to plan and carry out a program of seminars that would meet the specific needs of his interns.

In one mountainous county, where some interns were two hours or more away from any well-populated central area, the group could hold seminars only occasionally. Accordingly, from time to time, entire weekends were utilized for this purpose. In some of the other counties, where the locations of interns were almost as widely scattered but where travel was a little more feasible, seminars were held in a central location twice a month. In those areas where it was

practicable, seminars were scheduled for after-school hours once a week. Sometimes the interns met in a centralized location; at other times they met in selected elementary school classrooms.

The content of the seminars varied almost as much as the geography of the counties and depended upon the situation. Some coordinators organized a definite schedule of outside experts for input from content fields, acting upon the conviction that even though coursework in methodology was part of the year's program, teachers in self-contained classes really need a tremendous amount of subject matter content and methods available to them immediately. Others visualized the seminar group as primarily a sharing and mutual-support group, with input from subject matter content fields given in response to the expressed needs of the interns. All utilized the seminar as a sounding board in which interns could talk freely to each other and to the coordinator about their triumphs, frustrations, and perplexities. The coordinator, not having a line relationship to the interns, was in an excellent position to listen, suggest, counsel, and encourage. The only seminar that did not turn out to be warm and interactive was one to which the cooperating college assigned one of its professors rather than the intern coordinator as the seminar instructor. Since the professor had no contact with the interns' classrooms, his seminar could not be based on any personal knowledge of the interns' problems. The interns' reactions to this seminar were therefore justifiably negative.

All the seminars included instruction in the administration, scoring, and interpretation of the *Wide Range Achievement Test,* the *Murphy-Durrell Reading Readiness Analysis,* and Flanders' system of interaction analysis, all of which were to figure prominently in the evaluation of the project. It is important to note here that the use of tests mandated by state law was ruled out because this was the year that new tests were adopted by the state, thus jeopardizing comparability for purposes of this study.

The Wide Range Achievement Test (1965 edition).[2] Pretesting and post-testing of the pupils taught by the interns was part of the original design of the EPDA, Part B-2, intern project in California. To satisfy this requirement, the *Wide Range Achievement Test* was selected on the basis of its ease of administration, usability, and recent date of revision. This test was used for interns' pupils in the second through the eighth grades. Results of the pretesting and post-testing are reported in detail in Chapter V and in Appendix E.

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[2] J.F. Jastak, S.W. Bijou, and S.R. Jastak, *Wide Range Achievement Test* (Revised edition). Wilmington, Del.: Guidance Associates, 1965.

The Murphy-Durrell Reading Readiness Analysis.[3] This test was selected because it reflects much of the recent research that has been done on the importance of phoneme perception and letter recognition in beginning reading. Its diagnostic aspects make it particularly desirable for use with pupils in the first grade for whom it was selected. There proved to be some question as to its value as a research instrument for purposes of this study, however, because the stanine evaluation procedures by which the Murphy-Durrell results are reported are incompatible with those of the WRAT, which are reported according to grade levels.

Flanders' system of interaction analysis.[4] This instrument effectively provides feedback to the intern about his own teaching skills, thus helping him to become an autonomous learner. The use of Flanders' system of interaction analysis in this project is described later in this chapter.

Interns' opinions of the seminars reflected the variations among the seminars themselves. Comments ranged from "great" and "pertinent" through "satisfactory" and "some helpful, some not" to "tiring" and "too many seminars." The seminars were considered of excellent quality by 53 percent of the interns, and 43 percent considered them to be about average. Only three individuals felt that the seminars were poor.

The following comments from three interns in three different areas are illustrative of the way the interns felt about the seminars:

> *Intern A:* We met weekly on Tuesdays. The people who were scheduled to meet with our group were *most* attuned to our need for relevant, practical material and ideas. I consider this the single most valuable course.
>
> *Intern B:* The seminars are the greatest and most practical method of teaching interns. The reason stems, I think, from the need to express frustrations and successful ideas.
>
> *Intern C:* Good to get together and talk with the other interns. *Always* get new ideas! Hope I can find as exciting innovative new ideas in my second year.

Assistance from Supervisors

The county intern coordinator provided regular, responsive assistance to the interns throughout the year. Obviously, the amount of time he spent in the classroom and the frequency of his visits varied

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[3]Helen A. Murphy and Donald D. Durrell, *Reading Readiness Analysis.* New York: Harcourt, Brace & World, Inc., 1965.

[4]Edmund J. Amidon and Ned A. Flanders, *The Role of the Teacher in the Classroom.* Minneapolis: Paul S. Amidon and Associates, 1963.

according to the needs of the individual interns, with some interns needing much more of his time and help than others. As a general rule, coordinators spent at least one and one-half hours per week with each intern. This time was used to visit the intern's classroom, demonstrate teaching techniques and the use of new materials to him, help him diagnose his pupils' difficulties, or provide him private counseling and a listening ear.

Other sources of help for the intern included the principal, other teachers in the building, other interns, consultants from both the school district administrative office and the office of the county superintendent of schools, and occasionally the professor assigned by the cooperating college to serve as a liaison between the college and the project.

In assessing all these helpers, the interns generally agreed that the assistance from the county coordinator was excellent and readily available. Principals were much less available to the interns, but when they did have time to help, their assistance was considered valuable. The other teachers in their schools were perceived as extremely supportive and helpful by about one-third of the interns. College personnel were rarely seen by interns in the field and were therefore not generally perceived as performing a helping function.

Two comments from interns in different counties are illustrative of the enthusiasm with which the supervisory assistance was received:

> *Intern A:* Great! The one strong item of the program was quality in this area. The program supervisor was very sensitive to our needs and did her best to help us when we were down. This quality included those chosen to share ideas and instruct us in seminars.
>
> *Intern B:* How any of them (principal, intern coordinator, or other teachers) could be more helpful, I really don't know. They were wonderful. Especial bouquets to my principal and intern coordinator – two people outstanding as friends and professional confidants.

More than 92 percent of the principals indicated that they, too, viewed with favor the supervision provided for the interns by the coordinators. It more than met their expectations in most cases. As far as their own supervisory role was concerned, about half of the principals felt they had done an adequate job of supervising the interns, while the other half wished they had had more time to devote to them. Two principals stated they had given the interns more supervision than they would ordinarily have provided for regular beginning teachers.

Professional Coursework

Each cooperating college and university was faced with the challenging problem of designing for the interns an off-campus program of coursework that would maintain standards and be of as high quality as the regular on-campus program of teacher education. Courses scheduled would have to satisfy the legal requirements in California for a fifth year. They would also have to meet the criteria of the internship program in terms of relevance, practicality, needs of individual interns, and needs of the rural and isolated situations in which the interns worked. The actual schedule of courses for each project will be found in Appendix A.

Comments by the interns indicate that the courses varied widely with respect to effectiveness. Nearly all the interns were enthusiastic about the student teaching during the summer program and their internship teaching during the year. They praised the seminars that were led by the intern coordinators, who were, of course, thoroughly conversant with the interns' classroom situations. Such remarks as "high survival value," "great morale builder," and "met a need to share experience with other interns" and many references to the seminars as a source of courage and help characterized the responses.

Other courses throughout the year varied in quality and practicality in terms of how the instructor selected by the college conceived his role. Course offerings that provided rich resources and vital information and that were presented in a creative and stimulating manner were acclaimed. On the other hand, there was negative reaction to inflexible and traditional courses that included term papers, midterms, finals, and the like, because it was felt that these courses had not been developed to meet the needs of the interns. Above all, the interns demanded a reality-based curriculum. They would agree with authors Sarason, Davidson, and Blatt in their statement: "What is so distressing to us is not only that the theory and practices of training frequently bear little relation to each other, but that neither bears a strong relationship to the reality of the everyday tasks of the teacher."[5]

Comments from 33 percent of the principals indicated that, from their viewpoint, the coursework was satisfactory and met the needs of their interns. However, some 15 percent felt that the course load was too heavy for beginning teachers, a danger to be averted in the future by better joint planning among all the agencies concerned.

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[5]Seymour B. Sarason, Kenneth Davidson, and Burton Blatt, *The Preparation of Teachers: An Unstudied Problem in Education.* New York: John Wiley & Sons, Inc., 1962, p. 120.

Intern Self-evaluation and Autonomous Learning

Early in the project the intern coordinators chose Flanders' system of interaction analysis as one of the focal points of the year's study for themselves and for the interns under their direction. After weighing the merits of a number of other systems for objectifying teacher behavior, the coordinators selected Flanders' technique because it appeared to be manageable under the rural and isolated conditions in which the interns were teaching, and it appeared to lend itself to the autonomous, self-directed teacher learning desired as one of the outcomes of the project.

It is assumed in this study that teaching implies behavior and that behavior can be studied, changed, and improved. If the beginning teacher is to improve his teaching, he must have a means of receiving feedback and analyzing his own teaching so that he will be able to modify his behavior to enhance his pupils' learning. Another essential is that the feedback and analysis occur in a nonthreatening atmosphere in which neither job security nor administrative evaluation are involved. The atmosphere must be one in which the beginning teacher is free to work out a personal teaching style and to attempt various instructional strategies without evaluative pressure.

Flanders' system is basically a method of objectifying, quantifying, and organizing data on the verbal interaction that takes place in the classroom. Granted, it describes only that portion of the interaction which is verbal; however, since in the classroom someone is talking more than 60 percent of the time and that person is the teacher more than 70 percent of this time, the verbal interaction can be considered representative of the general interaction process.[6]

The intern himself may use Flanders' system in privacy by means of a tape recorder. Or his coordinator, during a classroom visit, may act as the observer. In any case, the person doing the observing records a number for the category of verbal interaction he hears at three-second intervals over a period of from 10 to 20 minutes. These numbers are then transferred to a matrix in such a way that teaching patterns, or instructional strategies, become visible. These patterns may then be compared with the intended pattern, or ideal matrix, that was part of the intern's lesson plan. A briefly annotated listing of the categories of Flanders' system of interaction analysis will be found in Appendix C. The techniques of the system are described in detail in the references listed at the end of this report.

Because of the time that had to be spent on training, it was not feasible during the first year of the project to analyze extensively the

[6]Ned A. Flanders, *Teacher Influence, Pupil Attitudes, and Achievement* (OE-25040, Cooperative Research Monograph No. 12). Washington, D.C.: U.S. Department of Health, Education, and Welfare, 1965, p. 1.

effect of the use of interaction analysis by the interns. Now that the intern coordinators are familiar with this feedback system, it will be possible to study its effects in greater depth during the second year of the project.

Throughout the first year of the project, the emphasis in the study of interaction analysis was on encouraging the teacher to talk less and listen more, to use pupil ideas, to develop his questioning skills, and to acquire a repertoire of teaching strategies to facilitate reaching his objectives. The hope has been that the intern will become a lifelong student of teaching, and this is the first step. Milton Haberman has stated this viewpoint extremely well:

> A good behavioral indication of whether a beginner understands the nature of teaching is his willingness to listen to pupils. Professional listening requires that the teacher be attentive, remember and utilize pupils' talk. Being attentive means giving the youngster real attention – not allowing him to address a teacher distracted by other tasks or engaged in other responsibilities. Remembering what pupils have said enables the teacher to understand the process of pupil growth and to plan future activities. The teacher's ability to use pupils' ideas is reflected in his questions and in the manner in which he attempts to extend thinking by combining pupils' statements and encouraging clarification.
>
> All of these critical behaviors are derived from the intern's initial willingness to listen. Less successful beginners seem to regard their pupils' talk as some form of interference while more successful teachers attempt to elicit pupil talk as one of their major purposes. If teacher education programs are to be derived from successful teaching behaviors, then there must be plans for offering students practice in listening and using pupils' ideas.[7]

The interns' reactions to the use of interaction analysis were mixed. A little more than half of them made positive comments about it or at least said that the system would be valuable if there were more time to implement it. The remainder reacted more or less negatively. The following comments from the interns are enlightening:

> *Intern A:* The IA was a big help to me. It made me very much aware of my teaching methods and showed me where I needed to improve.
>
> *Intern B:* I didn't realize it would be so effective until I had completed my matrix. I definitely realized my strong and weak points while interacting with my students.
>
> *Intern C:* IA is a fine topic for one or two seminars and for a seasoned teacher – but for a teacher who is just starting out, facts and methods are much more useful.

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[7]Martin Haberman, "Relating the Study of Teaching to Other Dimensions of Teacher Education: A Proposal," in *The Study of Teaching.* Edited by Dean Corrigan. Washington, D.C.: The Association for Student Teaching, 1967, p. 27.

Intern D: I did gain some awareness of my teaching methods. I feel it should be started earlier.

Intern E: I'm not so sure of the value of IA as a means of feedback evaluation. I can see its potential value. However, the times that I used this method, I was too aware of what I was doing and, therefore, didn't feel as though it was a valid feedback tool at the present time.

The Summer Postservice Period

Because of the individualized nature of the entire program, the training period during the summer after the internship year can only be described as an opportunity for each intern to finish his preparation as a teacher. Course requirements for this period were fairly general in each participating county so that interns had a certain amount of freedom to choose the fields of study that would be of most significance to them. No one was required to repeat any course he had taken before entering the program.

The intern credential granted by the state is valid for two years. It was not mandatory, therefore, that the intern complete the entire 30 semester hours required for the standard credential by the end of the summer. However, most interns preferred to finish the intensive program at that time in order to qualify for the standard credential before beginning their second year of teaching. A few – those who decided to travel or engage in other work during the summer – deferred the remainder of the coursework until the second year.

Program Evaluation

The final step in the implementation of the program model is evaluation. This is the complex process of assessing the individual intern in terms of his performance as a teacher and of analyzing the program as a whole with respect to its effectiveness in preparing beginning teachers for rural schools and, for that matter, for other schools too. The results of these research efforts on the 1969-70 program will be found in Chapter V.

Before considering the evaluation, however, the program model should be viewed in terms of the interfacing responsibilities of the participating agencies. These are described in Chapter IV.

chapter IV

RESPONSIBILITIES OF PARTICIPATING AGENCIES

In this chapter the program model will be analyzed according to the interrelatedness of the activities and responsibilities of the participating school districts, offices of county superintendents of schools, the State Department of Education, and the colleges and universities. A review of the interfacing responsibilities of all these participants reveals that the program was decidedly a mutual effort.

Responsibilities of the School District

The responsibilities of the school district in the internship program are as follows:

1. Recruit, interview, screen, and select candidates who are suitable for internship within the district, in cooperation with the participating college or university and county superintendent of schools. Offer conditional employment, as described later in this section.
2. Provide relevant student teaching assignments in the summer.
   a. Select fully certificated master teachers on the basis of their instructional and interpersonal skills and willingness to participate.
   b. Offer a modern program that emphasizes such areas as individualization and diagnostic and prescriptive teaching.
   c. Place interns at the grade level at which they will be teaching in the fall.
   d. Consider the performance of the intern during the summer period as part of the screening and selection process. The teaching contract offered the intern is contingent upon his successful completion of the summer preservice training.
3. Employ the intern as a beginning teacher for the internship year, placing him not lower than the first step of the salary

schedule for a beginning partially credentialed teacher.[1] Federal guidelines specify that those persons who successfully complete the short-term, intensive preservice training program should be employed by the local educational agency in which they have received their training.

a. Place interns in schools whose staff members have a strong commitment to internship, since the success of the internship year depends largely on the positive support and encouragement that is given to the interns in the schools to which they are assigned.
b. Place each intern at the grade level at which he was successful during the summer training period.
c. Assign realistic class loads of not more than 30 pupils who are within the normal range of achievement and behavior.
d. Wherever possible, place two or more interns in the same school rather than each in an isolated situation.

4. Involve the community.
   a. Provide interns with an orientation to the school district and to the culture and mores of the community.
   b. Provide continuing support and assistance from members of the district's professional staff, such as the librarian, psychologists, curriculum consultants, and research personnel.
   c. Provide interns with continuing contact with the parents of their pupils.
   d. Institute and maintain a positive program of information and public relations in each community in which the interns are teaching.

Responsibilities of the Office of the County Superintendent of Schools

The responsibilities of the office of the county superintendent of schools in the internship program are as follows:

1. Assist the school districts within the county in recruiting, screening, and selecting suitable intern candidates.
2. Provide administrative and clerical services, curriculum consultants, and educational media specialists.
3. Provide space and supportive services to facilitate the program of coursework offered by the college or university for the interns.

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[1]California law provides that the salary may then be reduced by not more than one-eighth to offset the cost of the amount of supervision that is proportionate to the reduction. In no case may an amount be withheld that causes the salary to be less than the legal minimum of $6,000 per year.

4. Cooperate with the district, the college or university, and the State Department of Education in the planning and implementation of the entire program.
5. Fund one-fourth of the salary of the county intern coordinator, whose responsibilities are as follows:
   a. Develop the county's proposal, which may cut across district or county lines. In many cases the small rural districts or counties lack the necessary resources to develop an independent proposal.
   b. Supervise and coordinate the preplanning necessary for the recruitment, screening, and selection of candidates, for the participation of interns in summer school, and for the selection and orientation of master teachers.
   c. Act as the "college arm" for the supervision of summer student teaching in those areas located at great distances from the college campus.
   d. Plan and coordinate, with the districts and the colleges or university, the instructional period devoted to the orientation of the interns and to their study of the community.
   e. Give personalized assistance to the interns throughout the year, and hold problem-centered seminars for their benefit on a regular basis.
   f. Maintain liaison with each principal involved in the internship program, working in cooperation with him and his staff for the mutual benefit of all persons connected with the project.
   g. Plan and coordinate, with the districts and the college or university, the pattern of inservice college courses to be offered for the interns.
   h. Instruct interns in the use of Flanders' system of interaction analysis as a means of feedback on their teaching performance, and utilize these concepts in counseling with interns regarding their performance in the classroom.
   i. Assist in implementing the evaluation design of the project, including giving tests as necessary and instructing interns in how to give tests and record and analyze results; follow-up activities with interaction analysis; and the collection of final evaluation data.
   j. Give interns practical assistance and instruction throughout the year on the prevention and diagnosis of reading deficiencies, and provide prescriptive methodology for overcoming or reducing such deficiencies.
   k. Prepare program reports and final evaluation data as requested by the state director of the internship program.

l. Participate during the year in staff development meetings called for the county intern coordinators by the state director of the internship program.

Responsibilities of the Cooperating College or University

The responsibilities of the cooperating college or university in the internship program are as follows:

1. Screen applicants with respect to acceptability for matriculation.
2. Facilitate registration for interns, utilizing either extension or regular graduate-level enrollment procedures, whichever are more appropriate to the program.
3. Provide adequate support and assistance to the county intern coordinator and sufficient supervision of the project to ensure quality control and to certify units and grades for transcript purposes.
4. In cooperation with the participating county superintendent of schools and the school districts, plan a teacher education program that will be fitting and appropriate for this project.
   a. Provide a modern teacher education curriculum that includes staff differentiation and team teaching concepts, questioning skills, inquiry training, techniques for individualization of instruction, diagnosis and prescription in teaching, and Flanders' system of interaction analysis and other means of securing feedback on teacher performance.
   b. Focus on the integration of theory in practice, and provide opportunities for instructors to observe the interns in their classrooms.
   c. Design coursework to meet the diagnosed needs of the interns and their rural situations, providing interns with opportunities for experiences, courses, and unit values that will enable them to meet state certification requirements.[2]

Responsibilities of the State Department of Education

The responsibilities of the State Department of Education in the internship program are as follows:

1. Manage the necessary fiscal and budgetary aspects of the project.

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[2]In California, a year of post-baccalaureate study is required for standard certification. This year must consist of 30 semester hours or 45 quarter units of upper-division or graduate-level work.

2. Select a state director of the project, whose responsibilities are as follows:
   a. Supervise the statewide project, ensuring compliance with federal and state guidelines.
   b. Coordinate efforts among all the participants.
   c. Assume leadership in instruction in interaction analysis, performance-based objectives, individualization, and diagnostic and prescriptive teaching.
   d. Furnish inservice education in new techniques for county intern coordinators.
   e. Provide year-round quality control and in-progress review.
   f. Maintain liaison of participants with the State Department of Education.
   g. Secure evaluation of pupil achievement; interns' attitudes, self-ratings, and instructional techniques; and ratings of interns by their principals and supervisors.
   h. Utilize evaluation data in revising plans for future programs.
   i. Disseminate the results of research on the internship program.

chapter V

EVALUATION OF THE PROGRAM

Of the 101 interns who began the program in the summer of 1969, a total of 90 were still participants in the project the following June. A variety of reasons account for the 11 interns who did not complete the program.[1] Results of the research on the 90 interns who were in the program for the entire year are reported in this chapter.

Interaction Analysis[2]

Every intern in the project proved that he had acquired the technical skills needed to record interaction analysis. Interns tallied and transferred to matrices a number of representative lessons involving their verbal interaction with their pupils and interpreted these matrices in terms of the teaching patterns and instructional strategies specified as objectives for the project. An analysis of the 106 matrices submitted reveals that the objectives had been achieved. Acquisition of the instructional skills involved was further confirmed in personal visits by the state director of the project to the classrooms of every intern in all seven participating counties.

The objectives of the internship project with respect to interaction analysis were as follows:

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[1]The 11 withdrawals included the following persons:

Summer school:	One army wife whose husband was transferred
	One intern who could not meet federal entrance criteria
	One intern who voluntarily withdrew, giving no reason for his action
Fall semester:	Two women who became pregnant
	Two interns who were reassigned by their districts to other teaching positions outside the project
	One intern who was killed in an automobile accident
	One intern who was inadequate as a first grade teacher. This was the result of a misassignment since the intern had been successful in the summer program at the intermediate level.
Spring semester:	One intern who was dismissed because of a conflict with the school district governing board
	One intern who was reassigned because of a conflict with his principal

[2]For a detailed explanation of interaction analysis and the numbering system it involves, see: Edmund J. Amidon and Ned A. Flanders, *The Role of the Teacher in the Classroom.* Minneapolis: Paul S. Amidon and Associates, 1968.

1. Eighty percent of the interns would be able to reduce the amount of teacher talk below 60 percent. *This objective was achieved by 84 percent of the interns.* In other words, here is evidence that 84 percent of the candidates learned to talk relatively less than most teachers do, at least upon occasion. Such results imply that the great majority of the interns are able to listen to their pupils and to stimulate pupil participation to a greater extent than is ordinarily found in elementary school classrooms.
2. Eighty percent of the interns would be able to reduce the use of Flanders' categories 5, 6, and 7 (lecturing, giving directions, and criticizing respectively) to less than 60 percent of the time. *This objective was achieved by 95 percent of the interns.* The interns who achieved this objective have learned to influence their pupils indirectly by accepting their feelings, praising them, accepting their ideas, and questioning them, instead of depending upon direct influence as exemplified by lecturing, giving directions, and criticizing. Nearly all the interns learned to involve their pupils in learning experiences without excessive lecturing or belabored direction giving. It is particularly significant that they learned to perform as uncritical, non-punitive adults with children.
3. Eighty percent of the interns would demonstrate the ability to use the three teaching patterns that are described in the following paragraphs. In each situation the intern was to determine the kind of verbal behavior he intended to use to accomplish his objectives for the class. Sample lessons were taped and tallied, and matrices were submitted. *Eighty-three percent of the matrices clearly depicted the intended pattern, while 17 percent represented unsuccessful attempts.*

Three successful teaching patterns emerged from an analysis of the matrices. The first pattern is one of verbal interaction in which the teacher asks questions, the pupils answer, and the teacher gives an accepting or clarifying response. This pattern is identified in the Flanders' system as 4-8-3. (See Figure 4.)

The second teaching pattern is more complex in that it involves dialogue between the teacher and his pupils so that the higher cognitive skills, such as generalization or application, may be encouraged. This pattern builds upon the first pattern and is identified in the Flanders' system as 4-8-3-4-9-3. (See Figure 5.)

The third teaching pattern is the Socratic technique in which the teacher asks a question, the pupil answers, and the teacher responds by asking another question. This pattern is identified in the Flanders' system as 4-8-4. (See Figure 6.)

First event \ Second event	1	2	3	4	5	6	7	8	9	10	Total
1											0
2											0
3			2	(33)	1						36
4				5	1		1	(44)	3	10	64
5				1	3					1	5
6				2				3			5
7			1	4				3		1	9
8			(30)	7		4	5	18	2	4	70
9			3	1					4	1	9
10				11		1	3	2		9	26
Total	**0**	**0**	**36**	**64**	**5**	**5**	**9**	**70**	**9**	**26**	**224**
	100				**19**			**79**		**26**	

Teacher talk = 53 percent
Percent of teacher talk 5-6-7 = 16 percent

Fig. 4. Interaction Analysis Matrix, 4-8-3 Pattern

Second event

First event	1	2	3	4	5	6	7	8	9	10	Total
1											0
2											0
3			12	(27)				6	5	1	51
4				10				(37)	2	2	51
5					5				2		7
6											0
7				3			3	1			7
8			(29)	7	1		4	(70)	3		114
9			(10)	2	1				(46)	1	60
10				2					2	3	7
Total	**0**	**0**	**51**	**51**	**7**	**0**	**7**	**114**	**60**	**7**	**297**
	102				**14**			**174**		**7**	

Teacher talk = 34 percent

Percent of teacher talk 5-6-7 = 20 percent

Major pattern ——————

Minor pattern - - - - - -

Fig. 5. Interaction Analysis Matrix, 4-8-3-4-9-3 Pattern

First event \ Second event	1	2	3	4	5	6	7	8	9	10	Total
1											0
2											0
3			2						1		3
4				4				162	3	8	177
5							1				1
6											0
7				1						1	
8				154			5	1	11	171	
9			1	5						6	
10				13	1			4	1		19
Total	**0**	**0**	**3**	**177**	**1**	**0**	**1**	**171**	**6**	**19**	**378**
	180				**2**			**186**			

Percent of teacher talk 5-6-7 = 1 percent
Teacher talk = 48 percent

Fig. 6. Interaction Analysis Matrix, 4-8-4 Pattern

The most common problem encountered by those failing to meet the criteria was the inability to respond to pupils without praising them. This is indicated by the use of the less productive 2s, in which the teacher responds with praise, instead of the desired 3s, in which the teacher responds in a manner that facilitates discussion.

The second most common problem that was evident in the unsuccessful attempts was the inability of some interns to keep a focus on the desired pattern. This problem is indicated by a proliferation of 9s, indicating student-initiated ideas, for example, when 8s, signifying more predictable pupil replies, had been sought. This illustrates the difficulty of keeping a classroom discussion on the subject.

The third most common problem appearing in the unsatisfactory matrices was the tendency of the teacher to talk too much.

It is interesting to note that of all three patterns desired, the second pattern (4-8-3-4-9-3) is by far the most difficult to achieve, and yet 86 percent of the interns who attempted it succeeded. Since the raising of the cognitive level of classroom dialogue is also emphasized in the Hilda Taba technique that is used extensively in California social studies instruction,[3] the interns' skill in this area may be the result of the reinforcement that comes from this additional emphasis and practice. Intern coordinators in several of the counties stressed discussion skills of this kind within the social studies context as well as in terms of interaction analysis.

Of those attempting the Socratic questioning pattern (4-8-4), 88 percent succeeded. Fewer presented only the 4-8-3 pattern for appraisal, perhaps because if the intern could achieve this pattern, he could then move rather readily to the more complex one and present the 4-8-3-4-9-3 pattern instead. Of those presenting only the 4-8-3 pattern, 77 percent achieved their intended goal.

Ratings, Achievement Tests, and Attitude Tests

Three major procedures were used to evaluate the relative effectiveness of the 90 interns who remained in the project throughout the year. These were (1) subjective ratings by the principal and supervisor; (2) standardized pretests and post-tests in reading or mathematics given to the pupils of the interns in October and May (a seven-month interval); and (3) a standardized pretest and post-test of teacher attitudes that was administered to the interns in June, before the beginning of the first summer program, and again the following May (an 11-month interval). The results of these evaluation

[3] Hilda Taba, *Curriculum Development Theory and Practice.* New York: Harcourt, Brace & World, Inc., 1962.

procedures will be described here. The statistical technicalities involved are included in appendixes D and E for those interested in the research processes that were utilized.

Ratings

The objective with respect to ratings was that 80 percent of the interns would be rated at the 50th percentile or higher when compared with other first-year teachers. *Principals rated 74 percent of the interns at the 60th percentile or higher. The intern coordinators, who provided classroom supervision to the interns, rated 90 percent of them at or above the 60 percentile.*

More than half of the interns were rated by their principals at or above the 75th percentile, while more than three-fourths of the interns were rated at that level by their supervisors. The intern coordinators placed 41 individuals in the top 10 percent of all beginning teachers. This position is described on the rating sheet in these words: "It is difficult to imagine a more effective new teacher." Granted, the intern coordinators may have some ego involvement in such a rating; nevertheless, since these county coordinators are so highly experienced and well qualified in teacher supervision and have spent about an hour and a half per week in the classrooms of the interns, it seems reasonable to assume that their opinions are based on a great deal of first-hand information that is directly related to instructional techniques. On the other hand, in making evaluative judgments of teachers, principals use broader indices that are not necessarily related to the instructional objectives of this study. Notwithstanding possible differences in viewpoints, the ratings of principals and supervisors have a correlation coefficient of .54, which is statistically significant at the .001 level.

Table 9 gives detailed information about the correlations between principals' ratings, supervisors' ratings, and interns' self-ratings. The table shows statistically significant agreement between principals and supervisors on all the attributes measured. However, there is little correlation in most cases between these ratings and the interns' self-ratings.

Achievement Tests

The objective with respect to achievement was that 80 percent of the pupils taught by each intern would demonstrate average or better growth in the competencies measured. The *Wide Range Achievement Test* (WRAT) (1963 revision) was used for pretesting and post-testing the reading competencies of interns' pupils in grades two through eight.

Comparison of pretests and post-tests shows that 66 percent of the pupils in grades two through eight demonstrated average or better

Table 9

Correlations of Ratings for 90 Interns: Principal Versus Supervisor, Principal Versus Intern, Supervisor Versus Intern*

Rating†	Correlation of ratings		
	Principal versus supervisor	Principal versus intern	Supervisor versus intern
Motivation	.57	.27	.15
Diagnosis	.44	.09	-.03
Diagnostic instruction	.46	-.07	-.03
Instructional material	.42	.05	.00
Evaluation	.45	.10	-.04
Classroom management	.67	.38	.32
Parent/teacher work	.51	.13	.03
Communication with teachers	.67	.34	.30
Cooperation with teachers	.72	.14	.26
Meeting of requirements of school administration	.68	.52	.55
Self-conduct	.51	.13	.21

*A correlation of .27 or higher is significant at the .01 level.

†See Appendix D for precise wording of ratings.

growth in reading in relation to their own previously established rates of progress. While the objective of 80 percent was not reached, it can be asserted that the interns' performance in teaching reading easily equals what one might expect from experienced teachers. A further breakdown of this statistic shows that 64 percent of the pupils tested on Level I of the WRAT (1,170 pupils in grades two through six) had made average or better progress, while 84 percent of those tested on Level II (135 pupils in grades seven and eight) made such progress. It is also noteworthy that the 80 percent objective was achieved or exceeded in one-third of the interns' classrooms.

A definition of "average growth," taking into account initial ability, will be found in Appendix E in conjunction with the technical data.

Tables 10 and 11 reveal the interesting fact that in every case the post-tests given seven months after the pretest indicated reading scores averaging into the next higher grade level even though the pupils had another month of instruction still to go. This is exemplary by any standards.

Pupils in three first grade classrooms were tested on the *Murphy-Durrell Reading Readiness Analysis* since they were, of course, unable to take the pretest for the WRAT. Although these pupils demonstrated impressive growth, the results of the testing could not be compared with the WRAT scores because the results of these tests are of different types. A discussion of the achievement of these first grade children will be found in Appendix E.

Attitude Tests

The objective with respect to attitudes was that 80 percent of the interns would show improvement in their attitudes to teaching.

Interns were pretested and post-tested with the Minnesota Teacher Attitude Inventory (MTAI). According to the results of the tests, 61 percent of the interns showed improvement in their attitudes to teaching. This is noteworthy in view of the deterioration in attitudes of beginning teachers that has been reported in much of the literature describing research on the MTAI.[4] One might speculate that beginning teachers maintain more positive attitudes when given adequate support from the field and continuing identification with a teacher education program throughout their first year of teaching. The data on the MTAI pretests and post-tests are given in Appendix E.

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[4]Jacob Getzels and Philip Jackson, "The Teacher's Personality and Characteristics," in *Handbook of Research on Teaching.* Edited by N.L. Gage. Chicago: Rand McNally & Co., 1963, pp. 506-582.

Table 10

Raw Scores, Grade Levels, and Standard Score Means and Standard Deviations for Interns' Pupils in Grades Two Through Six Who Were Tested on Level I of the WRAT Reading Test

Grade	Number of pupils tested		Raw score		Grade level		Standard Score	
			Pretest	Post-test	Pretest	Post-test	Pretest	Post-test
2	180	Mean	39.06	48.05	2.18	3.02	94.59	98.36
		Standard deviation	9.83	10.34	.94	1.28	14.88	16.58
3	170	Mean	49.93	57.48	3.22	4.28	95.97	102.38
		Standard deviation	10.97	11.77	1.39	1.96	10.61	20.19
4	259	Mean	57.91	65.29	4.31	5.61	98.61	104.51
		Standard deviation	11.52	12.76	1.82	2.55	18.04	22.21
5	208	Mean	64.33	71.68	5.41	6.94	99.15	106.67
		Standard deviation	12.50	12.58	2.21	2.83	19.81	22.54
6	353	Mean	68.44	74.01	6.11	7.45	100.34	106.51
		Standard deviation	11.04	11.77	2.19	2.72	18.39	21.23

Table 11

Raw Scores, Grade Levels, and Standard Score Means and Standard Deviations for Interns' Pupils in Grades Seven and Eight Who Were Tested on Level II of the WRAT Reading Test

Grade	Numbers of pupils tested		Raw score		Grade level		Standard score	
			Pretest	Post-test	Pretest	Post-test	Pretest	Post-test
7	52	Mean	43.88	52.62	7.29	9.39	98.90	109.35
		Standard deviation	13.99	16.84	3.03	4.01	21.36	26.57
8	83	Mean	33.05	46.36	5.41	8.28	81.95	97.10
		Standard deviation	12.08	15.01	2.32	2.79	13.93	17.03

Other Comparisons

Other analyses of the data included as many intercorrelations among all the identified variables as it was feasible to make; for example, age and sex of intern in relation to pupil achievement, relationship of intern's MTAI score to pupil achievement, and so on. It is interesting, although not surprising, that little relationship was found to exist among such variables. The only significant correlations obtained ($p<.01$) were the correlations of the difference scores (degree of change in pupil achievement) with interns' prior experience with children and with the principals' ratings of effectiveness. The numerous intercorrelations that were made are described in Appendix E.

Summary

The data that have been discussed in this chapter indicate a marked improvement in average pupil achievement as well as in intern attitudes toward teaching over the period of time evaluated in the present study. Impressive ratings of the interns were submitted by their principals and coordinators. No evidence for the validity of the various ratings on the MTAI as predictors of pupil achievement emerged from the study of the first year of the internship program. Sex, age, and source of undergraduate degree of intern and a number of other variables were unrelated to pupil achievement.

Since this is an in-progress report of a two-year experiment, a follow-up study of the first-year interns has already begun. A new group of 90 interns began preparation in June, 1970. They will be studied with the same research techniques and the same degree of thoroughness as the first group, and the results of that study will be reported.

chapter VI

CONCLUSION

In retrospect, it appears that California's program model for the preparation of rural elementary school teachers through internship has met with a great measure of success during its first year. Nearly all of the high performance goals of the program were achieved, and some of them were even surpassed. The program has unquestionably produced a group of young teachers with accepting attitudes toward children and with competence in teaching, as evidenced by the achievement of their pupils. Furthermore, these beginning teachers are equipped with self-evaluative skills that will enable them to continue to grow professionally.

A new source of supply of teachers for rural schools has been tapped by the program. Typically, candidates in the rural internship program are young people who could not or would not remain in college for a fifth year. They are young, bright, hard-working, and sophisticated. They were well prepared for teaching and wanted professional instruction that was relevant, practical, and stimulating. These candidates have been put through a pace that is indeed taxing, and they have demonstrated conclusively that they have the "staying power" that is necessary in today's demanding classrooms. The whole program is, in a sense, a continuous, rigorous selection process.

From the foregoing description of the program, it is clear that it has bridged some gaps that have long needed to be bridged – for instance, the gap between theory and practice, the gap between preservice and inservice education, and the gap between higher education and students.

The program model for rural internship is a dynamic model. Many improvements in implementing the design in the second year have already been made as a result of the first year's experience. To cite one example, the first year's evaluation revealed the importance of making the student teaching during the first summer more relevant to the September assignment. Consequently, this part of the program was greatly improved for the benefit of the second group of interns. As a matter of fact, the program has been improved in many areas, thanks to the criticism from the highly articulate first-year interns.

In conclusion, it seems appropriate to compare this program with Stone's developmental paradigm for innovative curricular experiments in teacher education:[1]

Stage I: Idea to Action. This program is the fruition of an idea by which rural teacher education could be strengthened, an idea that was promulgated by experimentally minded teacher educators and appropriately funded.

Stage II: Launching. The program got off to a successful start, but certainly not without the criticism from the traditionalists which, according to Stone, accompanies this stage.

Stage III: Showdown. Both the future of this program and its effect on conventional teacher education remain to be seen. Will it survive as a parallel program? Will it replace more traditional programs?

Stage IV: Impact on Other Curricula. Will greater relevance become a critical issue? Will this small step toward performance-based teacher education for California be influential?

Stage V: A Changed Climate on Campus. How will the openness, flexibility, and freedom of this program make itself felt on campus?

Stage VI: Changes in the Community. Is this a breakthrough for the rural and isolated schools? Will this new training provide teachers who are different enough to make a difference?

The stage is set. The time is right. And the opportunity is clearly a tremendous one.

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[1]James C. Stone, *Breakthrough in Teacher Education.* San Francisco: Jossey-Brass, Inc., 1968, pp. 178-80.

appendix **A**

COURSES LEADING TO THE STANDARD CALIFORNIA TEACHING CREDENTIAL THAT ARE OFFERED AT COLLEGES AND UNIVERSITIES COOPERATING IN THE TEACHER INTERNSHIP PROGRAM

CHICO STATE COLLEGE

Schedule of Courses for the Siskiyou and Shasta County Programs:

Summer Session, 1969

Code	*Title*	*Semester hours*
Ed. s103, s104	Student Teaching	4
Ed. s160E, 160H	Problems of Teaching	2

Second (Short) Summer Session, 1969

Ed. s100	Foundations	4	4
Ed. s101A	Reading	2	2

Fall Semester, 1969

Ed. 160L	Internship Seminar	1
Ed. 398	Independent Study	2

These courses are designed to meet specific needs of individual interns.

Spring Semester, 1970

Ed. 160L	Internship Seminar	1
Ed. 398	Independent Study	2

These courses are designed to meet specific needs of individual interns.

Summer Session, 1970 (On-campus)

Interns will complete in residence the 12 units needed to fulfill their credential requirements.

Psych. s100	Psychological Foundations of Education		4
Ed. s112	Elementary Methods (Choices include math, social science, language arts, or foreign language.)		2
	Electives and/or additional methods courses		6
		Total	30 semester hours

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FRESNO STATE COLLEGE

Schedule of Courses for the Fresno County Program:

Summer Session, 1969

Code	*Title*	*Semester hours*
E Ed. 105	Development and Learning	3
E Ed. 105.S	Inservice Problems in Elementary Education	3
E Ed. 120.2	Reading in the Elementary School, Including the Phonics Method	3
E Ed. 185	Orientation seminar (Scheduled for two weeks prior to the opening of school)	2
Fall Semester, 1969		
E Ed. 267	Teaching Internship	6
E Ed. 268	Seminar for Interns	2
Spring Semester, 1970		
E Ed. 267	Teaching Internship	3
E Ed. 268	Seminar for Interns	2
E Ed. 100	School and Society (or Reading, if not taken earlier)	3
Summer Session, 1970		
E Ed. 120.3	Language Arts in the Elementary School (3 sem. hrs.)	
E Ed. 120.7	Teaching Mathematics (3 sem. hrs.)	
E Ed. 120.1	Social Studies in the Elementary School (3 sem. hrs.)	
	Any two of the above courses:	6
	Total	33 semester hours

NOTE: In addition to the courses listed for the Fresno County program, interns must complete the general education credential requirements. These include at least three courses in English, one of which must include work in advanced composition. A course dealing with the arithmetic and algebra of the rational number system must also be completed in order to satisfy the specifications of Title V of the Elementary and Secondary Education Act. These requirements are normally met by taking the following courses at Fresno State College: Mathematics 140, English 134, and two other courses in English.

FRESNO STATE COLLEGE

Schedule of Courses for the Kings County Program:

Summer Session, 1969

Code	*Title*	*Semester hours*
E Ed. 105	Development and Learning	3
E Ed. 120.2	Reading in Elementary School, Including the Phonics Method	3
E Ed. 185	Orientation Seminar (Scheduled for two weeks prior to the opening of school)	2

Fall Semester, 1969

E Ed. 267	Teaching Internship	6
E Ed. 268	Seminar for Interns	3

Spring Semester, 1970

E Ed. 267	Teaching Internship	3
E Ed. 268	Seminar for Interns	2
E Ed. 100	School and Society	3

Summer Session, 1970

E Ed. 120.3	Language Arts in the Elementary school (3 sem. hrs.)	
E Ed. 120.7	Teaching Mathematics (3 sem. hrs.)	
E Ed. 120.1	Social Studies in the Elementary School (3 sem. hrs.)	
	Any two of the above courses	6
	Total	31 semester hours

NOTE: Interns in Kings County were to complete the additional requirements specified under the Fresno County program.

CALIFORNIA STATE COLLEGE, SAN BERNARDINO

Schedule of Courses for the San Bernardino County Program:

Summer Session, 1969

Code	*Title*	*Quarter hours*
Ed. X341	Elementary Curriculum and Methods II (Reading and Language Arts)	5

CALIFORNIA STATE COLLEGE, SAN BERNARDINO (Continued)

Code	*Title*	*Quarter hours*
Ed. 350	Elementary Student Teaching I	5
Math X301	Modern Arithmetic	5
Fall Quarter, 1969		
Ed. X352	Seminar in Elementary Education	5
Winter Quarter, 1970		
Ed. X340	Elementary Curriculum and Methods I (Social Studies and Science)	5
Spring Quarter, 1970		
Ed. X495	Social Foundations of Education	5
Ed. 351	Elementary Teaching II, Including Seminars	5
Summer Session, 1970		
Ed. 330	Psychological Foundations of Education	5
	Elective	5
	Total	45 quarter hours

Summer session, 1970, courses were not restricted to the campus. Coursework during the school year was offered on site within the school district by California State College, San Bernardino.

Provision was made that students who had completed psychological foundations were to take three upper-division or graduate-level electives to complete the state requirements.

UNIVERSITY OF CALIFORNIA, DAVIS

Schedule of Courses for the Tuolumne County Program:

Summer Session, 1969

Code	*Title*	*Quarter hours*
Ed. 330F	Foundations of Elementary School Education	9

UNIVERSITY OF CALIFORNIA, DAVIS (Continued)

Code	*Title*	*Quarter hours*
Fall Quarter, 1969		
Ed. 330E	Seminar in Elementary Education	2
Ed. 330C	Student Teaching in Elementary Schools	4
Ed. X381	Introduction to New Reading Adoptions	3
Winter Quarter, 1970		
Ed. 330E	Seminar in Elementary Education	2
Ed. 330C	Student Teaching in Elementary Schools	4
Ed. X380	Phonics: A Developmental Approach	2
Spring Quarter, 1970		
Ed. 330E	Seminar in Elementary Education	2
Ed. 330C	Student Teaching in Elementary Schools	4
Ed. X382	Elementary School Methods (Math)	3

Summer Session, 1970

The student could take the following courses at U.C., Davis; Stanislaus State College; or the University of the Pacific.

Elective	3
Educational Psychology	3-4
Educational Sociology	3-4
Post-session elective	3
Total	47-49 quarter hours

UNIVERSITY OF CALIFORNIA, RIVERSIDE

Schedule of Courses for the Riverside County Program:

Summer Session, 1969

Code	*Title*	*Quarter hours*
Ed. X340.2	Supervised Field Experience in the Elementary School	4
Ed. X324.5A	New Approaches to Mathematics in Schools	3

UNIVERSITY OF CALIFORNIA, RIVERSIDE (Continued)

Code	*Title*	*Quarter hours*
Ed. X324.31	Special Approaches to Reading: Elementary Schools	3
Ed. XRS108	Cross-Cultural Education in the American School	3
Ed. X328.92	Workshop: Education of Mexican-American Children from Migrant Families	Audit only (no credit)
	Cultural Patterns in Project School Districts	Not a course; information provided by county superintendent of schools
Fall Quarter, 1969		
Ed. X320.22A	District Internship Seminar, Part I	5
Winter Quarter, 1970		
Ed. X320.2B	District Internship Seminar, Part II	5
Ed. XL112	Psychological Foundations of Education	4
Spring Quarter, 1970		
Ed. X320.22C	District Internship Seminar, Part III	5
Ed. X324.48	Teaching the Language Arts in the Elementary Schools	3
Summer Session, 1970		
Ed. X396	Foundations of Elementary School Arithmetic, Part I	4.5
Ed. X324.6	Methods of Teaching Science in Elementary Schools, Part I	4
Ed. X324.72	Music in Elementary Schools, Part I	3
	Total	46.5 quarter hours

appendix **B**

EVALUATION PROCEDURES

A. Pupil Achievement

Pre- and post-tests in reading or arithmetic are (1) the *Wide Range Achievement Test,* 1965 edition (grades two through eight); and (2) the *Murphy-Durrell Reading Readiness Analysis,* 1965 edition (grade one). The objective is that 80 percent of the pupils taught by the interns will demonstrate average or better growth in the competencies measured.

B. Teacher Attitude

The *Minnesota Teacher Attitude Inventory* is used as a pretest and post-test. The objective is that 80 percent of the interns will show improvement in their attitudes to teaching.

C. Principal/Supervisor Rating

At the end of the school year, all principals and supervisors will be asked to rate the intern teachers on a specially designed, behaviorally expressed rating scale. The evaluation instrument will include a section in which the raters will be asked to compare the intern with other beginning teachers with whom they have worked. The objective here is that 80 percent of the interns will rank at the 50th percentile or higher when compared with other first-year teachers.

D. Interns' Self-evaluation

Given sufficient instruction in Flanders' system of interaction analysis during the year, 80 percent of the interns will, before the end of the school year, be able to do the following:

1. Tally, transfer to a matrix, and analyze ten-minute tape-recorded samples of their own teaching. These samples should indicate that (a) the amount of teacher talk is less than 60 percent; and (b) categories 5, 6, and 7 are used less than 60 percent of the time.
2. Plan, teach, tape record, and analyze a ten-minute lesson. This lesson should contain (a) a general 4-8-3 pattern of verbal interaction; (b) a 4-8-3-4-9-3 pattern; and (c) a 4-8-4 pattern.

appendix C

CATEGORIES FOR INTERACTION ANALYSIS

Indirect influence of teacher	1. Accepts Feeling Teacher accepts and clarifies the feeling tone of the students in a nonthreatening manner. Feelings may be positive or negative. Predicting or recalling feelings are included in this category. 2. Praises or Encourages Teacher praises or encourages student action or behavior. Jokes that release tension but that are not made at the expense of an individual, nodding head or saying "um hm" or "go on" are included in this category. 3. Accepts or Uses Ideas of Student Teacher clarifies, builds upon, or develops ideas suggested by a student. As teacher brings more of his own ideas into play, shift to category five. 4. Asks Questions Teacher asks a question about content or procedure with the intention that a student answer.
Direct influence of teacher	5. Lectures Teacher presents facts or opinions about content or procedure, expresses his own ideas, and asks rhetorical questions. 6. Gives Directions Teacher gives directions, commands, or orders with which a student is expected to comply. 7. Criticizes Students or Justifies His Own Authority Teacher makes statements intended to change student behavior from nonacceptable to acceptable pattern; bawls someone out; states why he is doing what he is doing; uses extreme self-reference.
Student talk	8. Student Talk-Response Students talk in response to teacher. Teacher initiates the contact or solicits student statement. 9. Student Talk-Initiation Students initiate talk. If "calling on" student is only to indicate who may talk next, observer must decide whether student wanted to talk. If he did, the observer should use this category.
	10. Silence or Confusion There are pauses in the flow of talk – short periods of silence and periods of confusion in which communication cannot be understood by the observer.

NOTE: There is *no* scale implied by these numbers. Each number is classificatory; it designates a particular kind of communication. To write these numbers down during observation is to enumerate; it is not to judge a position on a scale.

appendix **D**

EVALUATION FORMS

Principal/Supervisor Intern Evaluation Form*

Intern_____ County_____ Date_____
School district_____ School_____
Principal_____ Supervisor_____

The row of lines opposite each item below represents a range of effectiveness. Place an X on the line opposite each item which best describes the teacher.

Principals should preface each item below with, "In comparison with other first-year teachers I have known, how effectively does this teacher . . . "

Interns should preface each item below with, "How effectively do I . . . "

Working with Children	Very effectively	Effectively	Fairly effectively	Somewhat ineffectively	Ineffectively	Very ineffectively
1. Motivate, stimulate, and interest children in learning.	____	____	____	____	____	____
2. Apply diagnostic skills in assessing pupil needs and levels of attainment.	____	____	____	____	____	____
3. Prescribe appropriate instruction to meet diagnosed needs.	____	____	____	____	____	____
4. Select appropriate materials for instruction.	____	____	____	____	____	____
5. Evaluate pupil progress in light of ability and assignments.	____	____	____	____	____	____

[1]Adapted from the first-year teacher evaluation form, University of California at Davis, which is based on material in Egon G. Guba and Charles E. Bidwell, *Administrative Relationships.* Chicago: Midwestern Administration Center, University of Chicago, 1957, p. 105.

	Very effectively	Effectively	Fairly effectively	Somewhat ineffectively	Ineffectively	Very ineffectively
6. Manage classroom routines in such a way as to promote optimum learning of children individually and in groups.	___	___	___	___	___	___
Working with Adults						
1. Lay the groundwork for the parent and teacher to work together in the interest of the child.	___	___	___	___	___	___
2. Communicate and share ideas with other teachers.	___	___	___	___	___	___
3. Cooperate with other teachers in scheduling use of materials, equipment, or time.	___	___	___	___	___	___
4. Meet requirements of school administration.	___	___	___	___	___	___
5. Conduct self in such a way as to be accepted by the community.	___	___	___	___	___	___

Please check the one statement that best indicates your judgment of the effectiveness of this teacher compared with other first-year teachers with whom you have worked. The percentages following each statement can be used to define further what that statement means. For example, 10 percent would indicate that this first-year teacher is in the upper 10 percent of first-year teachers with whom you have worked. Eighty-five percent would mean that the teacher is in the lower 15 percent of first-year teachers with whom you have worked or that 85 percent of first-year teachers with whom you have worked did a better job.

1. It is difficult to imagine a more effective new teacher (10 percent).
2. I consider this teacher to be among the more effective new teachers under my present or past administration (25 percent).

3. The effectiveness of the new teacher is only slightly better than that of the average new teacher I have worked with (40 percent).
4. The effectiveness of this teacher is really a little below that of the average new teacher (55 percent).
5. I consider this teacher to be among the less effective new teachers under my present or past administration (70 percent).
6. It is difficult to imagine a more ineffective new teacher (85 percent).

Additional comments – Principals and/or teacher

Objective Evaluation of Interns by Principals

Intern _____

Using the following scale, please rate the intern on the items specified. Mark an "X" on the line which indicates your rating.

1. The teaching assignment this year for this intern has been	Extremely appropriate ___	Appropriate ___	Somewhat appropriate ___	In between, neither appropriate nor inappropriate ___	Somewhat inappropriate ___	Inappropriate ___	Extremely inappropriate ___
2. The screening and selection criteria by which this intern was chosen were	Extremely satisfactory ___	Satisfactory ___	Somewhat satisfactory ___	In between, neither satisfactory nor unsatisfactory ___	Somewhat unsatisfactory ___	Unsatisfactory ___	Extremely unsatisfactory ___
3. The supervision provided by the county coordinator and/or the college or university staff member for this intern has been	Extremely effective ___	Effective ___	Somewhat effective ___	In between, neither effective nor ineffective ___	Somewhat ineffective ___	Ineffective ___	Extremely ineffective ___
4. For this intern, the college or university workload accompanying the internship has been	Extremely realistic ___	Realistic ___	Somewhat realistic ___	In between, neither realistic nor unrealistic ___	Somewhat unrealistic ___	Unrealistic ___	Extremely unrealistic ___
5. The acceptance of this intern by the pupils he teaches has been	Extremely good ___	Good ___	Somewhat good ___	In between, neither good nor poor ___	Somewhat poor ___	Poor ___	Extremely poor ___

6. The acceptance of this intern by the parents of the pupils he teaches has been	Extremely good ____	Good ____	Somewhat good ____	In between, neither good nor poor ____	Somewhat poor ____	Poor ____	Extremely poor ____
7. The acceptance of this intern by the faculty in my school has been	Extremely good ____	Good ____	Somewhat good ____	In between, neither good nor poor ____	Somewhat poor ____	Poor ____	Extremely poor ____
8. This intern has utilized the special services, supplementary materials, and extra help which are available in this school	Extremely capably ____	Capably ____	Somewhat capably ____	In between, neither capably nor incapably ____	Somewhat incapably ____	Incapably ____	Extremely incapably ____
9. In general, the professional impact of this intern on our total school life this year has been	Extremely positive ____	Positive ____	Somewhat positive ____	In between, neither Positive nor negative ____	Somewhat negative ____	Negative ____	Extremely negative ____
10. If this intern were to seek reemployment with you next year, your reaction would be	Extremely favorable ____	Favorable ____	Somewhat favorable ____	In between, neither favorable nor unfavorable ____	Somewhat unfavorable ____	Unfavorable ____	Extremely unfavorable ____

Program Evaluation by Interns

A. Why did you choose to enter an intern program rather than a traditional program of teacher education?

B. Why did you choose this EPDA, B-2, rural internship program rather than some other intern program?

C. How do you feel about . . .
   1. Last summer's preparation for your internship?
   2. Your intern teaching assignment?
   3. Your school as a learning environment for an intern?
   4. Your school district's support as to physical facilities, books, materials, equipment, and the like?
   5. Your acceptance by the parents or by the community?
   6. The supervisory help you have received, and from whom – principal, intern coordinator or other county consultants, other teachers, and the like?
   7. Please estimate the number of hours of individual professional assistance you have been given per week. Include classroom visitation and formal or informal conferences. Do not include courses or seminars.
   8. The seminars: content, frequency, and so forth?
   9. Interaction analysis as a means of feedback and self-evaluation?
   10. The function of the college or university supervisor, if provided in your program in addition to the intern coordinator?

D. Please list by name each college course you took during the program, last summer, or during the year, and comments. (Use back for additional space.)

Course name	When? (Summer or in which semester or quarter)	Comments

E. In your opinion, what is the best thing about the EPDA, B-2, rural internship program?

F. In your opinion, what is the worst thing about the EPDA, B-2, rural internship program?

G. What suggestions can you make for improving the program next year?

Intern_____ School_____
County_____ District_____

Program Evaluation by Principals
(or Clerk of School Board)

A. What did you expect from the EPDA, B-2, rural internship program when you agreed to employ an intern (or interns)?

B. In what ways have your expectations been met?

C. In what ways have your expectations *not* been met?

D. How do you feel about . . .
   1. Supervision you have supplied?
   2. Supervision supplied by the intern coordinator?
   3. Supervision supplied by the college or university?
   4. Coursework accompanying the internship?
   5. Coordination and evaluation from the State Department of Education?

E. In your opinion, what is the best thing about the EPDA, B-2, rural internship program?

F. In your opinion, what is the worst thing about the EPDA, B-2, rural internship program?

G. What suggestions can you make for improving the program next year?

Name_____ School _____
County_____ District_____

Evaluation of Internship by Principals

Please rate the following aspects of the internship plan of teacher preparation according to the seven-step scale below, from highest to lowest. Place an X on the line indicating your rating in each case.

	Highest ——→ Lowest
A. The internship as a way to prepare first-year teachers	— — — — — — —
B. The internship as a way to recruit teachers for rural or isolated schools	— — — — — — —
C. The internship as a way to involve the public schools in teacher education	— — — — — — —
D. The internship as a way to provide inservice education for first-year teachers	— — — — — — —
E. The internship as a way to provide continuous screening and selection procedures for first-year teachers	— — — — — — —
F. The internship as a way of attracting mature persons to teaching	— — — — — — —
G. The internship as a way of securing supervision for the first-year teacher	— — — — — — —
H. The internship as a way to bring the college or university into the public school classroom	— — — — — — —
I. The internship as a way to bring about cooperation among the district, county, and college or university	— — — — — — —

appendix E

PRETESTS AND POST-TESTS

The results of the research reported in this study are based on several samples. Pretests and post-tests of pupil reading achievement, ratings by principals and supervisors, and intern self-ratings were obtained for 90 interns. The same group of interns also completed a brief background questionnaire and twice took the *Minnesota Teacher Attitude Inventory* (MTAI), once when they entered the program and again near the end of the year of internship.

Pupil Reading Achievement

Pretest and post-test scores on the reading subtest of the *Wide Range Achievement Test* (WRAT, 1965 revised edition) were provided by 68 interns on 1,430 pupils in grades two through eight. Fifty-one of these interns tested 1,170 pupils in grades two through six on the Level I form of the WRAT reading subtest. Certain results based on this sample of 51 interns and 1,170 pupils will be presented in this appendix. In addition 112 sixth grade pupils were either tested on the Level I form of the WRAT reading test and retested on the Level II form or were tested only on the Level II form. This subsample was kept separate in the correlation analyses from the sample of 1,170 pupils. Finally, regarding the WRAT, of the 148 pupils in grades seven and eight, 135 were tested on the Level II form of the WRAT. The remaining 13 were tested on Level I and were thus excluded from several analyses. The data for the seventh and eighth grade samples were also not included in the correlation analyses. A final and separate data sample involves 53 first grade pupils of three interns who provided pretest and post-test data on the *Murphy-Durrell Reading Readiness Analysis.*

In summary, achievement test data were provided by 71 interns on 1,483 pupils in grades one through eight. Two interns provided pretest and post-test data on the pupils, but the data from this small sample could not be meaningfully integrated into the present study. The remaining 17 interns who did not provide achievement test data were those teaching in kindergarten, prefirst grade, or departmentalized situations where such testing was considered inappropriate.

Since one of the objectives of this study was that 80 percent of the pupils taught by the interns would demonstrate average or better growth in the competencies measured, the evaluation of the present study in terms of this objective will be assessed directly by means of the WRAT reading test.

At this point, a word should be said about the definition of average growth for the purpose of this study. The test manual provides standard scores for six-month age intervals. For example, a seven-year-old who obtains a standard score of 90 according to the seven-year norm and retests with a standard score of 90 six months later according to the seven-and-one-half-year norm will have shown average growth over the six-month interval. Since the average pretest to post-test interval in the present study is seven months instead of six, it was decided that "average growth" should be defined as an increase of two standard score points. In the example given here, this would mean an increase in the standard score from 90 to 92. This procedure takes into account the amount of growth that is average for those initially high on the measure (as expressed, say, in terms of grade level).

According to this criterion, 66 percent of the interns' pupils in grades two through eight demonstrated average or better growth in reading. This falls short of the specified objective of 80 percent, which may be an unrealistic goal. It should be noted that 64 percent of the pupils who were tested on Level I and retested on either Level I or Level II demonstrated average or better growth in reading; however, a full 84 percent of those tested and retested on Level II showed such growth. This remarkable growth on Level II may reflect faulty norming of the test, or it may reflect the fact that students in grade eight were the only group to score considerably below the average on the first test. (Their standard score average was 81.95 as compared with the norm of 100.) However, the fact that seventh graders also showed this remarkable change would argue against the second possibility.

That the objective that 80 percent of the interns' pupils would show average or better growth may be unrealistic can be seen from the data presented in Table 1 (page 7). In every case, after seven months of instruction, reading gain was substantial enough to place the average score at the next higher grade level. (See Tables 1 and 2, pages 7 and 8.) Furthermore, a comparison of the average raw score on the post-test for a given grade with the pretest average raw score of the next higher grade shows no significant difference. In fact, after seven months of instruction, the average raw score on the post-test of the fifth graders (71.68) is significantly higher ($p<.01$) than the average raw score of the sixth graders when they began the school

year (68.44). Comparable analyses could not be made for seventh and eighth graders because the eighth graders were of considerably lower ability than the seventh graders to begin with. See Table 2 (page 8) for the standard score averages on the pretest.

The objective of better-than-average achievement could not be directly evaluated by the data on the 53 first-grade pupils who were tested and retested with the *Murphy-Durrell Reading Readiness Analysis.* Even so, it is of interest to note the following statistically significant increases in average score from pretest to post-test:

Category	Pretest score	Post-test score
Phonemes	30.38	43.32
Letter names	38.13	49.77
Learning rate	9.26	15.00
Total score	77.77	108.09

An even clearer indication of improved performance on the test is the percent of these first graders who tested in the upper quartile on the pretest and post-test. (According to the manual, these are students definitely ready to begin reading instruction.) The percents were as follows:

Category	Percent of pupils in upper quartile on pretest	Percent of pupils in upper quartile on post-test
Phonemes	11	59
Letter names	36	87
Learning rate	26	68
Average	21	83

As a matter of fact, many of these first graders were reading very capably by the end of the year.

Teacher Attitude

Although it is based upon somewhat limited evidence, research on the Minnesota Teacher Attitude Inventory does suggest that beginning teachers may be expected to show a decrease in favorable attitudes toward teaching when their attitudes are measured by the MTAI.[1] Accordingly, it may be unrealistic for attitudinal improve-

[1]Getzels and Jackson, "The Teacher's Personality and Characteristics," in *Handbook of Research on Teaching*, pp. 506-582.

ment to be an objective of this project if the improvement is to be assessed by the MTAI, the use of which is mandated by law. Since the research indicates a decrease in favorable attitudes on the MTAI after beginning classroom experience, attitude improvement for this study was defined as any degree of increase in MTAI scores from pretest to post-test. By this criterion, it was found that 61 percent of the interns showed attitudinal improvement related to teaching. Further, the mean score of the 90 interns increased from 53.27 to 61.94, a difference significant beyond the .01 level.

Other Comparisons

The discussion has focused so far on evaluation in terms of three types of variables: principal and supervisor ratings and intern self-ratings, pupil achievement, and intern attitudes toward teaching and toward children. Other questions need to be asked: "Are there relationships among these variables?" "Are they related to characteristics of interns?"

To answer the question of a relationship between pretest scores, post-test scores, and difference scores for pupil achievement, the analysis is limited to the data provided by the 1,170 pupils in grades two through six who were tested on Level I of the WRAT reading subtest. In this analysis, each of the 51 interns was assigned the average pretest, post-test, or difference score of his pupils. These values were then treated as scores and correlated with the MTAI pre- and post-test scores, the principal and supervisor ratings, and intern self-ratings and with selected characteristics of the interns. Pretest and post-test achievement scores did not correlate significantly with any variable. Difference scores (degree of change in achievement) correlated significantly ($p<.01$) with amount of interns' prior experience with children (.33) and with principals' ratings of effectiveness (.30). MTAI scores were not related to pupil achievement by this type of analysis. The age and sex of the intern and whether he received his undergraduate training within California were not related to his pupils' achievement.

For the total sample of 90 interns, it was found that there were no significant differences in average ratings of men and women, of those with and those without previous experience with children, of those over thirty and those under thirty, or of those who obtained their undergraduate education within California and those who studied out of state. Women scored higher than men to a significant degree on both the pretest and post-test of the MTAI. Interns under thirty also averaged higher than those over thirty on the MTAI, but only on the post-test. Interns who obtained their undergraduate education in California averaged higher on the MTAI pretest. Out-of-staters

increased their MTAI average such that the post-test average was not different from that of the comparison group. There were no differences on the MTAI between those with and those without previous experience with children. Finally, for the total sample of 90 interns, it is of interest to note that none of the ratings was related to MTAI scores.

appendix F

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